MANITOBA
DEPARTMENT OF HEALTH
Research & Planning

Health Manpower Provincial Report Manitoba 1982

Health Manpower Provincial Report - Manitoba 1982

Document Number ISSN 0700-2963

Research and Planning Directorate
Manitoba Department of Health

PREFACE AND ACKNOWLEDGEMENTS

The production of the Health Manpower Provincial Report was undertaken by the Research and Planning Directorate, Department of Health.

The preparation of this report necessitated the co-operation and indulgence of many people in the health field whom we would like to thank:

- representatives of the professional health manpower associations both at the provincial and federal levels,
- staff of the Manitoba Departments of Education, Health and Community Services and Corrections,
- staff of the Manitoba Health Services Commission,
- Universities Grants Commission,
- University of Manitoba,
- Red River Community College, Keewatin Community College and Assiniboine Community College,
- personnel departments of the general hospitals and personal care homes throughout the Province of Manitoba,
- representatives of the Federal/Provincial Health Manpower Advisory Committee and the Western Canada Health Manpower Requirements Subcommittee,
- staff of the Health Manpower Research Unit, University of British Columbia.

In particular, we would like to thank Leila Bell, Manager, Manpower and Education, Manitoba Health Services Commission; Fred Toll, Manager, Management Information, Manitoba Health Services Commission; Dr. G. Johnson, Medical Consultant, Manitoba Department of Health; and T.R. Edwards, C.A., Deputy Minister of Health, without whose support this report could not have been completed.

We acknowledge the contribution of Gleema Nambiar in the collection, complilation and preparation of data for the report. We would also like to acknowledge Barbara Millar's work in project implementation and Lucienne Stadnyk for the final preparation of the material.

Any questions, comments, corrections or additions may be sent directly to B. Millar, Manitoba Department of Health, 4th Floor, 831 Portage Avenue, Winnipeg, Manitoba or (204) 775-9761.

CONTENTS

Introduction 1

Summary Inventory - Health Manpower Supply 5

Health Manpower Supply 10
  Activity Workers 11
  Audiologists and Speech Pathologists 14
  Biomedical Engineering 20
  Biomedical Technicians 26
  Child Care and Allied Workers 29
  Chiropodists 33
  Podiatrists 33
  Chiropractors 36
  Community Health Workers 40
  Community Mental Health Workers 45
  Dental Assistant (Certified) 47
  Dental Hygienists 53
  Dental Mechanics 58
  Dental Nurses 61
  Dental Technicians 64
  Dentists 69
  Dietetic Aides 74
  Dietitian 76
  Electrocardiographic Technicians 81
  Electroencephalographic (EEG) Technicians 84
  Emergency Health Care Workers 88
  Health Educator 90
  Health Record Administrators and Technicians 94
  Health Services Administrators 100
  Health Sciences Librarians 104
  Homemaker 107
  Medical Laboratory Technologist 109
  Mines Inspectors 116
  Registered Nurses 118
  Nurses' Aides 128
  Orderlies 128
  Nursing Assistants (Licensed Practical Nurses) 130
  Occupational Therapists 135
  Occupational Therapy Assistants 140
  Operating Room Technician 142
  Optician (Dispensing) 145
  Optometrist 149
  Orthopaedic Technologists 152
  Osteopath 156
  Pharmacists 159
  Physicians 164
  Physiotherapists 216
  Physiotherapy Assistant 224
  Play Therapist 226
  Podiatrists 229
  Chiropodists 229

Prosthetist - Orthotist 230
Prosthetic and Orthotic Technicians 235
Registered Psychiatric Nurses 238
Public Health Inspectors 244
Radiological Technologists 249
Respiratory Technologists 260
Social Service and Allied Worker 265
Social Worker 269
Veterinarians 274
Ward Clerk 279

Annotated Bibliography 281

Information Sources 289

INTRODUCTION

The Health Manpower Provincial Report provides statistical data on health manpower occupations in Manitoba. Sections on each manpower category include the following information:

1. Definition of the Health Manpower Category;

2. Supply of Health Manpower Category by Manitoba Health Region. (Note this year, for the first time, data for Thompson Region have been broken out separately from the data for Norman Region.)

3. Regional Breakdown according to specialization within a health manpower group only if any exist and if the information was available;

4. Information on Educational programs for each Health Manpower Category (i.e. the number of graduates and/or number enrolled in program) by Manitoba Health Region, only if any training programs exist and if information on them was available;

5. Supply of Health Manpower Category by Province and Canada if information was available;

6. Provincial breakdown according to specialization within a health manpower category, only if any exist and if information was available;

7. Information on educational programs for each Health Manpower Category by Province and Canada, only if any exist and if information was available.

The time frame for all of the tables being as follows:

1. Historical Perspective - 1976-80(81)

2. Current Status - 1981 or 1982 (depending upon available data)

3. Future Projections - 1982(83) - 1986 - Applicable to regional tables only. An explanation regarding the method used to calculate projections follows this section.

PROJECTIONS

1. Population Projections

   Source of the 1982 population of Manitoba was the Manitoba Health Services Commission data as of December 31, 1981. Population projections were calculated, using M.H.S.C. data, on the same basis as is outlined in the Report on Population Projections for Hospital Utilization Study, Revised, April, 1975.

2. Supply Projections for Manitoba Health Region

a. To project a four year future trend for all categories (except dentists, registered nurses, pharmacists, physicians) by Manitoba Health Region, it was assumed that there would be a continuation of the present status. That is, the present ratio of each category by region to the population (See "Summary Inventory - Health Manpower Supply" on page 5) was determined, then the number of personnel needed to maintain this ratio over the next four years was calculated.

b. The projections on dentists, registered nurses, pharmacists and physicians were done using the General Manpower Stock Simulation Model (GMSS) at the Health Manpower Research Unit, University of British Columbia. (The physician projections were based on functional data from the Manitoba Services Commission).

3. Training projections

In some cases we were able to use projections of new practitioners generated by those responsible for the training. Where such projections do not exist, the size of the graduating class was used and no attempt was made to deal with attrition.

4. Footnotes

1. Alberta

Supply Information: Alberta Health and Social Services Disciplines Committee; Annual Report 1977-78.

Training Information: Alberta Advanced Education and Manpower, Program Services, Health and Social Services Programs: Alberta Health and Social Service Training Inventory July, 1978; July, 1979; April, 1980; March 1981; March, 1982.

Supply and Training Information: Alberta Health and Social Services Disciplines Committee; Health and Social Service Manpower in Alberta 1978; 1979.

2. British Columbia

Supply Information: Division of Health Services Research and Development;
Roll-Call '75
Mini Roll-Call '76
Roll-Call '77
Supplement to Roll-Call 1977 for Selected Health Groups
Roll Call '79
Roll Call '80
Roll Call '81

Training Information: Division of Health Services Research and Development;

Production '75
Production '77
Production '79
Production '81

Supply and Training Information: Health Manpower Research Unit; Prosthetic and Orthotic Manpower in British Columbia May, 1978.

3. Projected Data for Manitoba for Dentists, Registered Nurses, Occupational Therapists, Pharmacists and Physicians done using the General Manpower Stock Simulation Model (GMSS).

4. Supply and Training Information Across Canada

Health Economics and Statistics Division, Health Programs Branch; National Health and Welfare; Canada Health Manpower Inventory 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980.

5. Ontario

Supply and Training Information: Health Manpower Planning Section, Ontario Minister of Health; Health Manpower in Ontario, 1977, 1978, 1980. Note: Changes in Ontario data are due either to previously estimated historic figures being revised, or to other reasons further documented in the Ontario report.

6. Training Across Canada

H.R.Robertson, J.F. Houwing; L. Michaud; Health Manpower Output of Canadian Educational Institutions Association of Universities and Colleges of Canada; Ottawa; 1973.

7. Manitoba Department of Health; Departmental Documents and Reports.

8. Manitoba Health Services Commission; Budgets and Annual Reports.

9. Saskatchewan

Supply and Training Information: Policy, Research and Management Services Branch - Saskatchewan Department of Health; Saskatchewan Health Manpower Annual Report 1975; 1976; 1977; 1978.

10. Province of New Brunswick; Report of the Committee on Nursing Manpower 1975.

11. Aziz, J.; Supply Projections to 1981; Selected Health Manpower Categories Health Manpower Directorate; Department of National Health and Welfare.

12. Newfoundland

Training Information: Manpower Planning Division, Newfoundland Department of Health: Inventory of Health and Social Service Training Programs in Newfoundland; March, 1982.

Any sources other than the above will be listed under the corresponding table and will be footnoted with a number higher than 12.

It should be noted that a complete bibliography can be found in this report (See "Annotated Bibliography" on page 281).

Note: Throughout the report there may be reference to the Manitoba Department of Health and Community Services. This Department, as such, is no longer in existence. There are now two separate departments - the Department of Health and the Department of Community Services and Corrections.

There are certain problems with, and limitations to the Manitoba data collected which relate to its source, which is normally an associations' registry or mailing list. Some of these are:

a. Home addresses rather than business addresses are provided by the majority of associations, therefore the regional distribution of manpower is based on home addresses.

b. Some registries include all members regardless of whether they are retired or otherwise not in active practice. Usually there is a method of differentiating those not actively practicing, but in a number of cases this is not possible.

c. In cases where registration or licensing is not mandatory for employment, the data obtained from the association might not be representative of the size of the group, but rather would be an underestimate of the supply.

d. In order to obtain information on groups that have not formed associations we surveyed employers (i.e. health and related area employers most likely to hire the people in question). Not all employers responded.

e. In some categories, staff work only part-time or only spend part of their day working at the health position in question, thereby necessitating estimates on our part.

f. Manual counts had to be used in most cases, therefore the factor of human error must be taken into consideration.

SUMMARY INVENTORY - HEALTH MANPOWER SUPPLY

Health Category	Present Supply Manitoba 1982*	Ratio to Population Manitoba 1982	Ratio to Population Manitoba 1981**	Ratio to Population Manitoba 1980**
Activity Workers	196	1:5489	1:4849	1:4038
Audiologists & Speech Pathologists	110	1:9873	1:9873	1:11483
Biomedical Engineers	16	1:67239	1:72404	1:78739
Biomedical Technicians	26	1:6763	1:108606	1:110235
Child Care & Allied Workers	1819	1:591	1:669	1:898
Chiropractors	82	1:13120	1:15084	1:17224
Community Health Workers	18	1:59769	1:60337	1:78493
Community Mental Health Workers	117	1:9195	1:9127	1:10880
Dental Assistants (Certified)	319	1:3372	1:12342	1:9235
Dental Hygienists	183	1:5879	1:5686	1:6523
Dental Mechanics	54	1:19923	1:20886	1:20799
Dental Nurses	40	1:26896	1:22165	1:33404
Dental Technicians	140	1:7685	1:7758	1:11364
Dentists	426	1:2525	1:2526	1:2612

SUMMARY INVENTORY - HEALTH MANPOWER SUPPLY

Health Category	Present Supply Manitoba 1982*	Ratio to Population Manitoba 1982	Ratio to Population Manitoba 1981**	Ratio to Population Manitoba 1980**
Dietitic Aides	872	1:1234	1:538	1:593
Dietitians	147	1:7319	1:7595	1:8227
Electrocardiographic Technicians	115	1:9355	1:7542	1:8227
Electroencephalographic Technicians	17	1:63284	1:63886	1:64844
Health Educators	19	1:63284	1:55695	1:53773
Health Record Administrators & Technicians	136	1:7911	1:7542	1:7252
Health Services Administrators	154	1:6986	1:8485	1:8680
Health Sciences Librarians	68	1:15821	1:16456	1:18071
Homemakers	2285	1:471	1:500	1:555
Medical Laboratory Technologists	1145	1:940	1:1028	1:1050
Mines Inspectors	7	1:153691	1:155152	1:183724
Nurses (Registered)	8345	1:129	1:137	1:136
Nurses' Aides and Orderlies	3514	1:306	1:220	1:252
Nursing Assistants	3323	1:324	1:320	1:301

SUMMARY INVENTORY - HEALTH MANPOWER SUPPLY

Health Category	Present Supply Manitoba 1982*	Ratio to Population Manitoba 1982	Ratio to Population Manitoba 1981**	Ratio to Population Manitoba 1980**
Occupational Therapists	147	1:7319	1:8166	1:8612
Occupational Therapy Assistants	52	1:20689	1:24135	1:38012
Operating Room Technicians	59	1:18235	1:18101	1:16453
Opticians (Dispensing)	85	1:12657	1:13748	1:14897
Optometrists	73	1:14737	1:15297	1:16211
Orderlies and Nurses Aides	3514	1:306	1:220	1:252
Orthopaedic Technologists	11	1:97803	1:90505	1:91862
Osteopaths				1:1102345
Pharmacists	823	1:1307	1:1363	1:1394
Physicians	1823	1:590	1:621	1:671
Physiotherapists	299	1:3598	1:3707	1:3854
Physiotherapy Assistants	83	1:12961	1:18725	1:30621
Play Therapists	13	1:82756	1:90505	1:47778
Podiatrists	9	1:119537	1:135758	1:156986

SUMMARY INVENTORY - HEALTH MANPOWER SUPPLY

Health Category	Present Supply Manitoba 1982*	Ratio to Population Manitoba 1982	Ratio to Population Manitoba 1981**	Ratio to Population Manitoba 1980**
Prosthetists & Orthotists	14	1:76845	1:98733	1:100213
Prosthetic & Orthotic Technicians	12	1:89653	1:67879	1:52492
Psychiatric Nurses	944	1:1140	1:1009	1:1027
Public Health Inspectors	68	1:15821	1:16970	1:17170
Radiological Technologists	575	1:1871	1:1087	1:1914
Respiratory Technologists	134	1:8029	1:9051	1:11603
Social Service Allied Workers	101	1:10652	1:6426	1:8046
Social Workers	1000	1:1076	1:2105	1:2192
Veterinarians	174	1:6183	1:6314	1:6263
Ward Clerks	1082	1:994	1:2757	1:2709

* 1982 data were used for all of the Manpower categories, except three. These were Audiologists and Speech Pathologists, Dental Mechanics and Orthopaedic Technologists. 1982 data were not available as yet for these categories.

** Population of Manitoba used for ratios is taken from the Manitoba Health Services Commission data base.

TABLE 1 POPULATION OF MANITOBA BY HEALTH REGIONS 1982; AND PROJECTED POPULATION* 1983-1986

Region	1982[13]	1983	1984	1985	1986
Central	92,744	93,694	94,644	95,594	96,544
Eastman	82,111	84,486	86,861	89,236	91,611
Interlake	69,621	70,607	71,593	72,579	73,565
Norman	26,420	27,057	27,694	28,331	28,968
Parklands	52,011	52,113	52,215	52,317	52,419
Thompson	40,692	41,916	43,140	44,364	45,588
Westman	120,768	121,334	121,900	122,466	123,032
Winnipeg	591,468	598,522	605,576	612,630	619,684
Manitoba	1,075,835	1,089,729	1,103,623	1,117,517	1,131,144

* Please see explanation regarding population projections, page 1.

SOURCE: [13] Population of Manitoba by Health Region by Age and Sex, March 10, 1982. Produced by Statistics Branch.

Note: Since March, 1982 the population data have been revised. The population figures for several L.G.D.'s and U.T.'s are no longer split based on arbitrary percentage distribution. Population has been allocated by the M.H.S.C. according to Postal Codes, giving thus an exact (not estimated) figure. This has brought changes in a few regional totals as follows:

Population of Manitoba by Health Regions as of August 13, 1982

Central	Eastman	Interlake	Norman	Parklands
93,191	82,033	69,374	26,352	51,341

Thompson	Westman	Winnipeg	Manitoba
41,240	120,836	594,146	1,078,513

These revised data were not available at the time that the population projections were done; therefore, the population data used in this report are those data that are shown in Table 1.

HEALTH MANPOWER SUPPLY

CATEGORY: Activity Workers

DEFINITION: Activity Workers design and implement organized programs of individual and group activities for residents and/or patients in various facilities in the province. Persons employed in Activity Departments are required to deliver a wide scope of Activities to meet the recreational, creative, educational, social and spiritual needs of the residents and/or patients. Active and passive programs are offered. The object of "Activities" is to encourage resident and/or patient participation and involvement in meaningful and purposeful life experiences that are commensurate with their interests, chosen life-style and their mental and physical abilities.

Those interested in "Activities" should have good physical and mental health, demonstrated skill in relating to people as well as organizational ability. Successful completion of the certificate course for Activity Workers is an asset. Experience and/or training in related fields would be helpful.

At senior levels positions become more complex as employers are independently responsible for the execution and supervision of the total program and in some facilities the organization and direction of the volunteer program. Involvement in staff orientation, in-service education and case conferences are expected.[13]

---

[13] Win Lindsay; Manitoba Health Services Commission; August 9, 1977.

TABLE 2 NUMBER* OF ACTIVITY WORKERS 1976-1982 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF ACTIVITY WORKERS 1983-1986 BY MANITOBA REGION

Region	1976[8]	1977**	1978[8]	1979[13]	1980[13]	1981***[13]	1982***[13]	1983	1984	1985	1986
Central	25		24	30	53.5	55	31	31	32	32	32
Eastman	11		12	25	14	11	13	13	14	14	15
Interlake	11		12	34	15	8	9	9	9	9	10
Norman	2		4	38	4	1	2	2	2	2	2
Parklands	8		9	18	10	9	13	13	13	13	13
Thompson											
Westman	30		30	76	65.5	60	37	37	37	38	38
Winnipeg	109		108	144	111	80	91	92	93	94	95
Manitoba	196		199	365*	273*	224	196	197	200	202	205

* These statistics represent both full-time activity workers. Of the 196 activity workers employed in Manitoba in 1982, 89 were working on a part-time basis.

** Information was not available for 1977 as the reports on hospitals and personal care homes were done for a fifteen month period rather than on an annual basis.

*** The data for 1981 and 1982 are incomplete.

Note: Any activity workers there may have been in the Thompson Region from 1976-1981 are included in the Norman Region.

SOURCE: [13] Unpublished Survey Results; Department of Health; August 20, 1979; August 26, 1980; August 21, 1981; August 1982.

Information on supply and training of Activity Workers across Canada was not available.

TRAINING - ACTIVITY WORKERS

TABLE 3 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF GRADUATES 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman			11			2	9	9	9	9	9
Winnipeg	11	4	11	11	4	16	19	19	20	20	20
Manitoba	11	4	22	11	4	18	28	28	29	29	29

SOURCE: [13] Corresponsdence; Red River Community College; August 30, 1977; July 25, 1978; June 20, 1980; July 28, 1982. Assiniboine Community College; July 25, 1978; August 28, 1979; June 19, 1980; June 23, 1981; July 14, 1982.

CATEGORY: Audiologists and Speech Pathologists

DEFINITION: Audiologists provide diagnostic evaluation and rehabilitative services and conduct research related to hearing:

Administer air and bone conduction and other audometric tests and examinations to determine hearing efficiency. Coordinate audiometric results with medical, social, behavioural and other diagnostic data. Evaluate total response pattern and acoustic tests to differentiate between organic and non-organic hearing loss. Plan direct and participate in counselling, speech-reading and other rehabilitation programs. Act as consultants to educational, medical and other professional groups. Conduct research in physiology, pathology, biophysics and psychophysics of auditory system, if required. Design and develop clinical and research procedures and apparatus, if required. (Revised C.C.D.O. '80, p.44)

Speech Pathologists administer tests and observe patient to diagnose nature of disorder and to evaluate degree of impairment:

Plan and conduct remedial exercises and programs to correct stuttering, abnormal articulation and other disorders. Provide speech training for patient with communication problems caused by cerebral palsy, surgical removal of larynx, hearing deficiencies or other impairments. Plan individual or group therapy in rehabilitation of communication disorders. Counsel and guide language-handicapped individuals and their families, teachers or employers. Act as consultants to educational, medical, dental and other professional groups. Conduct research related to development of diagnostic and treatment techniques and procedures or design of apparatus. (Revised C.C.D.O. '80, p.46)

TABLE 4 NUMBER OF AUDIOLOGISTS 1976-1982 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[13] 1978	[13] 1979	[13] 1980	[13] 1981	* 1982
Central							
Eastman							
Interlake					1	2	
Norman					3	2	
Parklands					1	1	
Thompson				1			
Westman			1	1	1	2	
Winnipeg	7	7	10	10	9	11	
Manitoba	7	7	11	12	15	18	

* Data for 1982 were not available at time of printing.

SOURCE: [13] Correspondence; Registrar; Manitoba Speech and Hearing Association; March 1975; May 1976; May 1977; May 1978; May 1979; November 1980; December 1981.

Training

Training for audiologists is not offered in Manitoba.

TABLE 5 NUMBER OF SPEECH PATHOLOGISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982*
Central	1	4	3	3	3	5	
Eastman		2	1	2	3	3	
Interlake	6	1	2	3	2	4	
Norman	1		1	1	1	1	
Parklands			1	2	1	4	
Thompson	1	1	1	1	2	1	
Westman	5	5	9	3	5	7	
Winnipeg	40	42	53	53	64	67	
Manitoba	54	55	71	68	81	92	

* Data for 1982 were unavailable at time of printing.

SOURCE: [13] Correspondence; Registrar; Manitoba Speech and Hearing Association; March 1975; May 1976; May 1977; May 1978; May 1979; November 1980; December 1981.

Training

Training for Speech Pathologists is not offered in Manitoba.

TABLE 6 NUMBER OF AUDIOLOGISTS AND SPEECH THERAPISTS 1976-1982 BY PROVINCE, CANADA

Province	1976	1977	1978	1979	1980	1981	*** 1982
Manitoba	96[13]	96[13]	121[13]	106[13]	136[13]	149[13]	
Speech Therapists	55	55	71	68	81	92	
Audiologists	7	7	11	12	15	18	
Speech Therapists & Audiologists			1				
Provisional Members	31	31	30	20	24	22	
Associate Members	2	2	6	3	7	9	
Student Members	1	1	2	3	9	8	
British Columbia	152[2]	152[2]	146[2]	165[2]		178[2]	
Speech Therapists		132					
Audiologists		19					
Alberta	160[4]	189[4]	218[4]	226[1]			
Speech Therapists	138	168	200	203			
Audiologists	16	16	18	23			
Speech Therapists & Audiologists	6	5					
Saskatchewan	43[9]	43[9]	44[9]	**			
Speech Therapists	36	36					
Audiologists	7	7					
Ontario	395[5]	422[5]	462[5]	509[5]	562[5]	615[5]	
Speech Therapists	340	366	401	442	487	532	
Audiologists	55	56	61	67	75	83	
Quebec	201[4]	232[4]	260[4]	274[4]			
Speech Therapists & Audiologists	115	149	180	194			
Speech Therapists	68	63	59	60			
Audiologists	18	20	21	20			
New Brunswick	16[4]	21[4]	21[4]	22[4]			
Speech Therapists	12	16	17	17			
Audiologists	4	5	4	5			

TABLE 6 NUMBER OF AUDIOLOGISTS AND SPEECH THERAPISTS 1976-1982 BY PROVINCE, CANADA

Province	1976	1977	1978	1979	1980	1981	*** 1982
Nova Scotia	44[4]	47[4]	45[4]	61[4]			
Speech Therapists	32	35	34	46			
Audiologists	11	9	11	15			
Speech Therapists & Audiologists	1	3					
Prince Edward Is.	5[4]	7[4]	7[4]	8[4]			
Speech Therapists	5	7	6	7			
Audiologists			1	1			
Newfoundland	5[4]	13[4]	14[4]	18[4]			
Speech Therapists	3	12	12	16			
Audiologists	2	1	2	2			
Total for Canada	1117	1222	1338	1389**			
Speech Therapists & Audiologists	122	157	*				
Speech Therapists	689*	790	*				
Audiologists	120*	140	*				
Provincial Members	31	31	*				
Associate Members	2	2	*				
Student Members	1	1					

* Breakdown for Saskatchewan is not available, therefore these data are not complete.

** Incomplete due to lack of data from Saskatchewan.

*** Data for 1982 were unavailable.

SOURCE: [13] Correspondence; Registrar; Manitoba Speech and Hearing Association; March 1975; May 1976; May 1977; May 1978; May 1979; November 1980; December 1981.

TRAINING - AUDIOLOGISTS AND SPEECH PATHOLOGISTS

TABLE 7 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba							
British Columbia	14[2]	13[2]	6[2]	18[2]	9*[2]	15[2]	10[2]
Alberta	23[1]	21[1]	22[1]	22[1]	25[1]	22[1]	
Saskatchewan							
Ontario	48	55[5]	43[5]				
Quebec	62	71	74	71			
New Brunswick							
Nova Scotia**			18	19			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	147	160	163				

* Data revised as per source.

** The School of Audiology and Speech Therapy established at Dalhousie admitted it's first class in September 1976. This class graduated in May 1978.

CATEGORY: Biomedical Engineering

DEFINITION: "Biomedical Engineering involves the application of engineering principles to the adaption of equipment used in conjunction with living organisms (usually human beings) including such items as life support systems for underwater and space missions, devices for medical treatment, and instrumentation to monitor biological processes.

Clinical Engineering is a hospital based activity in which the engineer works closely with physicians and allied health personnel directly upon problems of concern in patient care.

Rehabilitation Engineering is a hospital or institution based activity in which the engineer identifies and solves problems relating to the development of rehabilitation devices, both electronics and mechanical."

DIVISIONS OF BIOMEDICAL ENGINEERING

The field of Biomedical Engineering can be subdivided into four main areas:

1. hospital or institution (clinical & rehabilitation)

2. research and development

3. industrial, sales, etc.

4. teaching

Clinical and rehabilitation engineers have the closest contact with patients, generally working within a hospital setting in the areas of electrical safety, equipment maintenance and teaching and instruction of medical and paramedical staff in the operation of medical electronic equipment. In the rehabilitation field, rehabilitation engineers deal directly with patients in fitting special devices, seating and mobility aids, etc..

Research and development more remotely from patients, may take place in a hospital, a university setting or industry, and may include a very wide range of topics. This involves the application of engineering and physical scientific principles to medical or biological problems.

The areas of industry and teaching are quite self- explanatory except that teaching is generally implied to be at the University or Community College level and industry is specifically related to the Biomedical Engineering Field.[13]

---

[13] N.D. Durie, Head, Medical Engineering Section, Division of Electrical Engineering National Research Council/National Executive Secretary, Canadian Medical & Biological Engineering Society.

TABLE 8 NUMBER OF BIOMEDICAL ENGINEERS 1976-1982 BY MANITOBA REGION, MANITOBA AND PROJECTED NUMBER OF BIOMEDICAL ENGINEERS 1982-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central											
Eastman		1									
Interlake		1	1								
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	24	15	19	15	14	15	16	16	16	16	16
Manitoba	24	17	20	15	14	15	16	16	16	16	16

SOURCE: [13] Correspondence; Secretary; Canadian Medical and Biological Engineering Society; July 17, 1976; April 22, 1977; April 24, 1978; June 18, 1979; July 7, 1980; July 17, 1981; October 1982.

TRAINING - BIOMEDICAL ENGINEERS

TABLE 9 NUMBER OF BIOMEDICAL ENGINEERS IN TRAINING 1976-1982 BY MANITOBA HEALTH REGION*

Region	1976[14]	1977[14]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	3	3	4	4	3	7	13
Manitoba	3	3	4	4	3	7	13

*Projections not available.

Note: The most common approach to Biomedical Engineering is at the graduate university level after a B.Sc. degree in engineering or physical science. The University of Manitoba does not have a separate degree program in Biomedical Engineering but rather a number of engineering professors have a strong interest in the area and supervise graduate students in a Biomedical Engineering program. Training and experience in the field after that are the most positive ways of obtaining status and expertise. There are usually about four students enrolled in the Biomedical Engineering program at the University of Manitoba. In 1981, however, due to an increase in grants, 7 students will be accepted in the fall.[13]

SOURCE: [13] Correspondence; Department of Electrical Engineering; University of Manitoba; June 12, 1978; May 29, 1979; August 19, 1980; May 29, 1981; November 1982.

[14] B. Leung; Development in Biomedical Engineering in Canada - Manpower and Government Activities; Health Manpower Directorate, Department of National Health and Welfare; Ottawa; 1974; p. 10.

TRAINING - BIOMEDICAL ENGINEERS

TABLE 10 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION AND PROJECTED NUMBER OF GRADUATES 1983-1986 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[13] 1978	[13] 1979	[13] 1980	[13] 1981	[13] 1982	[13] 1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	1	1	1	3		1	1	4*			
Manitoba	1	1	1	3		1	1	4			

*This statistic represents the number of students who are usually enrolled in the biomedical engineering program at the University of Manitoba at any given time.

SOURCE: [13] Correspondence; Department of Electrical Engineering; University of Manitoba; June 12, 1978; May 29, 1979; August 19, 1980; May 29, 1981; August, 1982.

TABLE 11 NUMBER OF BIOMEDICAL ENGINEERS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	24[13]	17[13]	20[13]	15[13]	14[13]	15[13]	16[13]
British Columbia	89[2]	115[2]	90	148[2]		119*[2]	
Alberta	4	7[1]	17	9			
Saskatchewan	3	5	7	10			
Ontario	118[5]	133[5]	148[5]	155[5]	170[5]	185[5]	
Quebec	32	46	63	55			
New Brunswick	7	7	12	10			
Nova Scotia	10	13	15	16			
Prince Edward Is.							
Newfoundland	3	3	2	4			
Yukon & Northwest Territories							
Canada	290	346	374	422			

* This figure includes technologists as well as engineers.

Note: Statistics may be incomplete as membership in the Canadian Medical and Biological Engineering Society is not mandatory.

SOURCE: [13] Correspondence; Secretary; Canadian Medical and Biological Engineering Society; July 1976; April 1977; April 1978; June 1979; July 1980; July 1981; October 1982.

TABLE 12 NUMBER OF GRADUATES OF PROGRAMS FOR BIOMEDICAL ENGINEERS, BY PROVINCE, CANADA, CALENDAR YEARS[4]

Province	Calendar Year 1976	Calendar Year 1977	Calendar Year 1978	Calendar Year 1979
Manitoba	1	1		4
British Columbia	1	1	1	7
Alberta	2	1	2	
Saskatchewan	6	9	1	2
Ontario	19	15	23	11
Quebec	4	8	2	6
New Brunswick		1		2
Nova Scotia				
Prince Edward Is.				
Newfoundland	6	14		
Yukon & Northwest Territories				
Canada	39	50	29	32

CATEGORY: Biomedical Technicians

DEFINITION: "Responsible for inspection, maintenance and repair of equipment; instruction in the safe and efficient use of equipment; provision of technical consultation and evaluation of equipment; design and building of special purposes equipment. Usually graduates who have studied general electronics at the technical level.[13]

---

[13] B. Leung; Development in Biomedical Engineering in Canada - Manpower and Governmental Activities; Health Manpower Directorate; Department of National Health and Welfare; Ottawa; 1973; p.4.

TABLE 13 NUMBER OF BIOMEDICAL TECHNICIANS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF BIOMEDICAL TECHNICIANS 1983-1986 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[13] 1978	[14] 1979	[14] 1980	[14] 1981	[15] 1982	1983	1984	1985	1986
Central											
Eastman											
Interlake					1	1					
Norman											
Parklands				2	4	4					
Thompson											
Westman	1	1	2	6	1	1	3	3	3	3	3
Winnipeg	21	16	9	4	4	4	23	23	24	24	24
Manitoba	22	17	11	12	10	10	26	26	27	27	27

SOURCE: [13] Correspondence; Rehabilitation Center for Children; Health Sciences Centre; Victoria General Hospital; Brandon General Hospital; July 1976; May 1977; August 1978.

[14] Unpublished Survey Results; Department of Health; August 20, 1979; August 26, 1980; August, 1981.

[15] Telephone Survey; Department of Health; August 12, 1982.

Training

There is no formal training course offered for Biomedical Technicians in Manitoba. Some Biomedical Technicians, however, complete a course in electronic technology from a Community College before entering the biomedical technology field. These electronic technology graduates receive any additional training they may require on the job.

TRAINING - BIOMEDICAL TECHNICIANS

TABLE 14 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976	1977	1978	1979	1980	1981	1982
Manitoba							
British Columbia	24[2]	24[2]	24[2]	24[2]	11*[2]	16*[2]	17*[2]
Alberta	5[13]	5[13]	5[13]	5[13]	5[13]	5[13]	
Saskatchewan							
Ontario	45[5]	50[5]					
Quebec							
New Brunswick							
Nova Scotia	1-2[12]	1-2[12]	1-2[12]	1-2[12]	1-2[12]	1-2[12]	
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	76	81					

* Data revised as per source.

SOURCE: [13] B.Leung; Development in Biomedical Engineering in Canada-Manpower and Government Activities; Health Manpower Directorate; Department of National Health and Welfare; Ottawa; 1974; p.11.

CATEGORY: Child Care and Allied Workers

DEFINITION: Provide care for and accept the responsibility for the development of children under 12 years of age in day care centres and family day care homes. (This category would include those responsible for the overall management and supervision of day care staff and daily programs; those, who in addition to working directly with children; those whose sole responsibility is working directly with children; those persons who provide family day care services in their own homes to a maximum of eight children.)[13] (Revised 1981).

---

[13] Correspondence; Child Care Services, Red River Community College; Child Day Care Program.

TABLE 15 NUMBER OF CHILD CARE AND ALLIED WORKERS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF CHILD CARE AND ALLIED WORKERS 1983-1986 BY MANITOBA REGION

Region	[13]* 1976	[13] 1977	[13] 1978	[13] 1979	[13] 1980	[13]** 1981	[13] 1982	1983	1984	1985	1986
Central	52	75	56	68	70	71	88	89	90	91	92
Eastman	56	28	40	56	52	60	78	80	83	85	87
Interlake	49	42	43	66	66	50	70	71	72	73	74
Norman	*	15		32	32	26	31	32	33	33	34
Parklands	30	30	20	32	32	22	41	41	41	41	41
Thompson	*	31	34	41	40	46	50	51	53	55	56
Westman	100	67	146	136	147	120	160	161	161	162	163
Winnipeg	519	628	803	900	789	1228	1301	1315	1331	1346	1362
Manitoba	847	916	1164	1331	1228	1623	1819	1840	1864	1886	1909

* Thompson region included in the Norman Region.

** Increase in numbers due to information received from previously unrecorded sources.

SOURCE: [13] Correspondence; Deputy Director; Child Day Care Program; Department of Community Services and Corrections; July 1976; January 1977; September 1978; June 6, 1979; May 17, 1980; July 30, 1981; August 30, 1982.

Correspondence; Executive Director; Agency Relations; Department of Community Services and Corrections; July 1976; June 1977; June 1978; June 8, 1979; October 6, 1980; July 30, 1981; May 11, 1982.

Correspondence; Executive Director; Office of Residential Care; Department of Community Services and Corrections; June 16, 1981.

TRAINING - CHILD CARE AND ALLIED WORKERS

TABLE 16 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	30	26	21	19	23	19	22
Manitoba	30	26	21	19	23	19	22

Note: Projections unavailable due to the re-structuring of the program. The above table includes only those who graduated from the Day Child Care Services Course at Red River Community College. In addition to the Day course, Red River Community College also offers an evening extension program which was initiated in the spring of 1972. This evening extension program had not previously been of the same calibre as the day program (ie.) graduates from the latter were more highly trained. However, as of 1982, the evening and day programs have been made equivalent. Hence, the final graduates from the former evening program will graduate in the spring of 1983.

SOURCE: [13] Correspondence; Child Care Services; Red River Community College; April 1975; August, 1976; August 1977; September 1978; May 1979; August 1980; June 1981; August 1982.

The historic and present statistics for graduates from the evening program are as follows:

	1976	1977	1978	1979	1980	1981	1982
Certificate	22	26	30	29	44	16	67
Advanced Certificate	2	3	2	3	3	3	6

In addition to graduates from Red River Community College, there are also a number of graduates from the Faculty of Human Ecology and the Faculty of Education at the University of Manitoba who go into the Child Care and Allied Workers Field. Approximately 30 graduates from the Family Studies stream in the Faculty of Human Ecology have entered the Child Care field between 1976 and 1980. Six entered in 1981 and seven in 1982.[14]

The Faculty of Education graduates approximately 25 students from its Early Childhood Education Program each year. Approximately 15 of these enter the public school system and 5 are employed by day care centres. In 1982, there were 27 graduates from the Early Childhood Education Program.[15]

SOURCE: [14] Correspondence; Faculty of Human Ecology; July, 1980; June 1981; August, 1982.

[15] Correspondence; Facutly of Education; June, 1981; August, 1982.

CATEGORY: Chiropodists

DEFINITION: Chiropodist means..., "a person who practises or advertises or holds himself out in any way as practising Chiropody and massage...not including amputation of, or treatment of injuries to, or infection of, the foot, toes, hand or fingers; or manicuring the hands; or the use of anaesthetic except as a spray; or the use of drugs or medicines other than local antiseptics.[13]

CATEGORY: Podiatrists

DEFINITION: Diagnose and treat diseases, disorders and deformities of human foot:

Diagnose tumors, ulcers, fractures, skin and nail diseases and deformities, using blood analysis, urinalysis, x-rays and other tests. Treat flat or weak feet, foot imbalance and other deformitiesl, using electrical and mechanical techniques. Treat corns, calluses, ingrown nails and other disorders, using surgical tools. Prescribe and administer medications. Correct deformities, using plaster casts, strappings, braces and prosthetic devices. Prescribe corrective footwear. Advise patients concerning treatment of disorders and proper foot care. Refer patients to physicians when symptoms observed in feet and legs indicate systemic disorders. (Revised C.C.D.O. '80, p. 14)

---

[13] Correspondence; Operational Support Services, Department of Health and Social Development; November 25, 1975.

TABLE 17 NUMBER OF CHIROPODISTS 1976-1982 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF CHIROPODISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman	1	1	1	1	1	1	1	1	1	1	1
Winnipeg	6	6	6	6	7	7	8	8	8	8	8
Manitoba	7	7	7	7	8	8	9	9	9	9	9

Note: There is not any differentiation made between Chiropody and Podiatry under Manitoba's Chiropody Act.

SOURCE: [13] Correspondence; Association of Chiropodists; May 1976; May 1977; July 1978; June 11, 1979; May, 1980; June 1981; April 15, 1982.

TABLE 18 NUMBER OF CHIROPODISTS/PODIATRISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	7[13]	7[13]	7[13]	7[13]	8[13]	8[13]	9[13]
British Columbia	33	37[2]	35	36[2]			
Alberta	14[1]	13[1]	12[1]				
Saskatchewan	13[9]	12[9]	12[9]				
Ontario	89[5]	85[5]	82[5]	83[5]	84[5]	85[5]	
Quebec*	9	7	3	126			
New Brunswick		2	2	1			
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	165	163	153				

* Quebec legislation requires all registered podiatrists to be fully qualified. In 1979, only 36 of the 126 were members of the Canadian Podiatry Association, as membership was not mandatory in 1978. In 1979, however, 100 percent enrollment was expected.

SOURCE: [13] Correspondence; Association of Chiropodists; May 1976; May 1977; July 1978; June 11, 1979; May 1980; June 1981; April 15, 1982.

Training

Chiropodists and Podiatrists are graduates of a four year program beginning with two years pre-medicine at a college of Chiropodic or Podiatric Medicine. These programs are not, at present, available in Canada but graduates are accepted from five accredited universities in the United States. Some provinces, including Manitoba, will accept graduates trained in Britain.

CATEGORY: Chiropractors

DEFINITION: Practise "The Science And Art of Palpating And Adjusting By Hand Only, The Articulations of The Human Spinal Column And Other Articulations":[12]

A chiropractor registered as a member of The Manitoba Chiropractors Association may, in connection with his/her practice, use X-ray shadow-photographs, if he/she first applies for and obtains from The Board of Chiropractors a certificate of competency.

Nothing in The Chiropractic Act or in the regulations made by The Board of Chiropractors "authorizes any person to prescribe or administer drugs for use internally or externally, or to use or direct or prescribe the use of anaesthetic for any purpose whatsoever, or to practise medicine, surgery, or midwifery."[13]

---

[13] An Act respecting the practice of Chiropractic.

TABLE 19 NUMBER OF REGISTERED CHIROPRACTORS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF REGISTERED CHIROPRACTORS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	4	4	5	5	6	8	6	6	6	6	6
Eastman	4	4	4	5	4	3	4	4	4	4	5
Interlake	2	2	2	1	1	4	3	3	3	3	3
Norman	1	1	1	1	1	1	2	2	2	2	2
Parklands	3	3	3	3	3	3	3	3	3	3	3
Thompson	1	1									
Westman	8	8	8	8	7	7	7	7	7	7	7
Winnipeg	35	35	36	39	42	46	57	58	58	59	60
Manitoba	58	58	59	62	64	72	82	83	83	84	86

SOURCE: [13] Correspondence; Office of the Registrar; Manitoba Chiropractor's Association; 1973-1980; May 8, 1980; November, 1981; October, 1982.

Training

Training for Chiropractors is not offered in Manitoba.

TABLE 20 NUMBER OF REGISTERED CHIROPRACTORS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	58[13]	58[13]	59[13]	62[13]	64[13]	72[13]	82[13]
British Columbia	210[2]	217[2]	241	247[2]		292[2]	
Alberta	243[1]	249[1]	257[1]	258[1]			
Saskatchewan	61[9]	65[9]	58	77			
Ontario	751[5]	811[5]	921[5]	1009[5]	1009[5]		
Quebec	286	320	357	500			
New Brunswick	16	15	19	27			
Nova Scotia	13	17	18	18			
Prince Edward Is.	2	2	2	3			
Newfoundland		1					
Yukon & Northwest Territories	2	1	1	1			
Canada	1642	1756	1933	2201			

SOURCE: [13] Correspondence; Office of the Registrar; Manitoba Chiropractor's Association; 1976-1982.

Training

There is only one training program offered for Chiropractors in Canada. It is offered by the Canadian Memorial Chiropractic College, Toronto.

Number of Chiropractors graduating from the above program 1972-1981.

1972[4]	1973[4]	1974[4]	1975[5]	1976[5]
46	66	66	97	99
1977[5]	1978[5]*	1979[5]	1980[5]	1981[5]
110	143	131	140	140

* In previous years, these figures have been based on historical outputs which have been 95% of first year enrollments. From 1979 onwards, the output figures are calculated as being 85% of first year enrollments.

CATEGORY: Community Health Workers

DEFINITION: The Community Health Worker's job has four components, none of which takes priority over another, but which vary in importance as community needs vary.

The four components are not separate entities, but blend with each other in providing health care on a social, emotional, and physical level.

These components are:

1. Direct Service (primary care)
2. Health Promotion
3. Health Education
4. Community Advocacy

Direct Service

The responsibility of the Community Health Worker is to recognize, treat and prevent complications of the common ills of her community. It also involves the referral and evacuation of patients when necessary to other health professionals or facilities.

After two years of training, a Community Health Worker would be competent in these areas:

- Recognition and treatment of common medical conditions such as otitis media, sore throats, gastroenteritis, usual childhood diseases, upper respiratory tract infections, common skin disorders;
- Recognition of complications of these common ills, referring or evacuating patients as necessary;
- Uncomplicated pre-natal and post-natal care of mother and child;
- Laboratory techniques such as dip-stick urinalysis, hemaglobin, and screening for significant bacteria;
- Dental care, especially fluoride brush-ins and the relief of pain;
- Emergency care for fractures, lacerations, burns, hemorrhage, unconscious persons, etc.;
- Screening program for vision and hearing;
- Management of village drug supplies, sterile supplies;

- Dispensing and supervising medication on the instruction of the public health nurse or physician.

In the broadest sense, "common ills" of the community involve not only physical ills, but emotional and social problems that interfere with every person's attaining his highest level of wellness.

The Community Health Worker, then, after two years of training would be competent in these areas:

- The recognition of life threatening psychiatric disorders, with prompt referral or evacuation of these patients;
- Community and professional resources available for people with emotional or social problems;
- Interviewing, counselling and supportive therapy for individuals and family, with referral to professionals when required;
- Counselling individuals who use drugs or alcohol which is dangerous to themselves or others, referring them to other resources when necessary;
- Involving the family in the rehabilitation of alcoholism or addicted persons;
- Follow-up care of those evacuated or referred to their other facilities on their return to the community.

1. Health Promotion

To promote the highest level of well-being for the community, the Community Health Worker should know the social and health services available for the community and the methods of obtaining these. She would be participating in preventive health programs (with the nurse or physician), such as immunization, TB control, family planning, and screening for vision and hearing.

The Community Health Worker would also have insight into village sanitation - water supply, garbage disposal, sewage.

The Community Health Worker, by her knowledge of and relationship with community members, would assist in the "case finding" of persons requiring either physical care, education or counselling and thus promote the well-being of community members.

2. Health Education

The Community Health Worker's job includes traditional public health educational, promotional, environmental and nutritional tasks. This often occurs when giving primary care, but may occur independently in the organization of small groups for various health needs, control of infectious diseases such as TB, veneral disease.

The Community Health Worker once again provides "first line" service to the community, but is knowledgeable of resource person and calls on them as required.

3. Community Advocacy

Being a member of the community in which he/she delivers health services, the Community Health Worker assists in making the concerns and needs of the community known to "helping professionals or programs", so the planning and development of health care is relevant to the community. He/she is also a force in assisting the community to recognize its responsibility, for its health care on both an individual and group level.[13]

---

[13] Community Health Worker Trainer; Department of Health and Social Development; June 23, 1976.

TABLE 21 NUMBER OF COMMUNITY HEALTH WORKERS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA*

Region	[13] 1976	[13] 1977	[13] 1978	[14] 1979	[14] 1980	[14] 1981	[14] 1982
Central	5	5	5				3
Eastman						3	1
Interlake	1	1	1		1	1	2
Norman	5	5	5	5	5	6	6
Parklands				2	2	2	6
Thompson	7	7	7	7	7	6	
Westman							
Winnipeg							
Manitoba	18	18	18	14	15	18	18

* Projections unavailable.

SOURCE: [13] Correspondence; Community Health-Worker Trainer; Department of Health and Social Development; October 16, 1978.

[14] Correspondence; Director of Administration, Social Services and Community Health. Department of Health and Community Services, August 21, 1979; May 5, 1980; May 25, 1981; August 16, 1982.

Information on the supply of this group (or similar groups) across Canada is not available.

Training

The Training program for Community Health Workers was discontinued in 1980 and has not since been re-implemented.

Training Across Canada

Alberta was the only province for which training information was available. Until 1977 the Alberta Vocational Centre offered a training program for Community Health Workers. The program was suspended in 1978 and 1979 for curriculum development. In 1980, the graduates of the new 3-5 week module program received their certificates.

The number of Graduates 1975-1980 in Alberta was:

1975	1976	1977	1978	1979	1980
1	4	12	0	0	9

CATEGORY: Community Mental Health Workers

DEFINITION: "Provide a comprehensive range of preventive and direct treatment services to a target population vulnerable to serious psychiatric conditions. Services include assessment crisis intervention, consultation and direct therapies to populations in a specified catchment area."[13]

---

[13] Province of Manitoba Civil Service Commission; Job Bulletin; July, 1976.

TABLE 22 NUMBER OF COMMUNITY MENTAL HEALTH WORKERS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF COMMUNITY MENTAL HEALTH WORKERS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]*	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	5	18	19	13	14	15	14	14	14	14	15
Eastman		13	12	13	14	15	13	13	14	14	15
Interlake	9	5	9	8	9	8	9	9	9	9	10
Norman		9*	3	3	3	4	3	3	3	3	3
Parklands		10	12	9	10	12	12	12	12	12	12
Thompson		*	5	5	5	7	7	7	7	8	8
Westman	7	19	21	17	18	20	19	19	19	19	19
Winnipeg		32	35	33	33	38	40	40	41	41	42
Manitoba	21	106	116	101	106	119	117	117	119	120	124

* Thompson included under Norman.

Note:

1977 - 47 of the 106 are Community Mental Retardation Workers
1978 - 47 of the 116 are Community Mental Retardation Workers
1979 - 43 of the 101 are Community Mental Retardation Workers
1980 - 45 of the 106 are Community Mental Retardation Workers
1981 - 47 of the 119 are Community Mental Retardation Workers and 4 are behavioral psychologists
1982 - 52 of the 117 are Community Mental Retardation Workers

Training

Those who are classified as Community Mental Health Workers in other provinces are not available.

Data on the supply and training of Community Mental Health Workers in other provinces are not available.

SOURCE: [13] Correspondence; Director of Administration, Department of Health and Community Services; June 1977; July 1978; May 1979; May 1980; May 25, 1981; August 16, 1982.

CATEGORY: Dental Assistant (Certified)

DEFINITION: In Manitoba a recognized Dental Assistant is a Dental Assistant who has completed a recognized dental assisting program. If the assistant has taken further education including a course recognized by the Manitoba Dental Association on x-rays, prophylaxis and fluoride applications and is registered with the Manitoba Dental Association she/he is a Certified Dental Assistant.[13]

---

[13] Correspondence, Manitoba Dental Nurses and Assistants Association; April, 1975.

TABLE 23 **NUMBER** OF CERTIFIED DENTAL ASSISTANTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF CERTIFIED DENTAL ASSISTANTS 1983-1986 BY MANITOBA REGION**

Region	1976[14]	1977[13]	1978[13]	1979[13]	1980	1981[13]	1982*** [15]	1983	1984	1985	1986
Central	5	7	10	8	8	7	8	8	8	8	8
Eastman	4	3	1	1	1		8	8	9	9	9
Interlake	5	2	2	4	4	4	4	4	4	4	4
Norman	3		2	2	2	3	7	7	7	8	8
Parklands	7					1	10	10	10	10	10
Thompson	*	4	1				2	2	2	2	2
Westman	17	23	21	14	14	13	28	28	28	28	29
Winnipeg	119	70	55	92	92	60	252	255	258	261	264
Manitoba	160	109	92	121	121	88	319	322	326	329	334

* The Thompson figures for 1976 are included in the Norman Region.

** Please note that the data from 1976-1981 are not complete. Membership in the three levels (Canadian, provincial, and local) of the Manitoba Dental Nurses and Assistants Association is not mandatory. Therefore, we do not know the exact number of dental assistants in the province during these years. Information for 1980 was not available.

*** In 1982, a telephone survey of dentists' offices was conducted to determine the number of dental assistants currently employed. 94% of the offices in Winnipeg, and 77% of the offices in the rest of Manitoba were contacted. (The Manitoba Department of Health and the City of Winnipeg Health Department were also contacted.) In addition to the certified dental assistants (Expanded Duty, Phase 2) shown in the table above, there are many dental assistants who have Chairside (Phase 1) or On-the-Job training as follows:

	Training	
	Chairside (Phase 1)	On-the-job
Central	4	6
Eastman	3	9
Interlake	1	11
Norman	4	2
Parklands	6	8
Thompson	3	2
Westman	4	7
Winnipeg	37	82
Manitoba	62	127

SOURCE: [13] Correspondence; President, Manitoba Dental Nurses and Assistants Association; May 7, 1976; June 8, 1977; February 25, 1978; April 1, 1979; August 25, 1981.

[14] Correspondence, Registry of Certified Dental Assistants; Manitoba Dental Association; May 7, 1976.

[15] Telephone Survey, Department of Health; August, 1982.

TRAINING - DENTAL ASSISTANTS

TABLE 24 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION*

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman	[13] 20	[13] 12	[13] 17	[13] 31	[13] 18	[13] 16	[13] 29
Parklands							
Thompson							
Westman							
** Winnipeg	[14] 128	[14] 40	[14] 50	[14] 60	[14] 38	[14] 71	[14] 67
** Manitoba	148	52	67	91	56	[15] 87	96

* Projections unavailable

** Figures for 1977 onwards have been adjusted for double counting (ie.) the majority of graduates from Tech. Voc. continue on and graduate from the expanded duty program at Red River during the same year.

SOURCE: [13] Correspondence; Keewatin Community College; May 10, 1976; May 30, 1977; May 3, 1978; July 5, 1979; June 20, 1980; June 24, 1981; July 28, 1982.

[14] Correspondence, Winnipeg Technical-Vocational High School; June 1, 1976; May 30, 1977; August 31, 1978; July 5, 1979; July 3, 1980; July 2, 1981; July 27, 1982.

Correspondence; Red River Community College; July 19, 1976; May 30, 1977; September 19, 1978; July 9, 1979; July 24, 1980; July 2, 1981; July 28, 1982.

TABLE 25 NUMBER OF MEMBERS OF THE CANADIAN DENTAL NURSES AND ASSISTANTS ASSOCIATION 1976-1982 BY PROVINCE OF RESIDENCE, CANADA[4]

Province	1976	1977	1978	1979	1980	1981	1982
Manitoba	121	150	150	133			
British Columbia	335	335	335	357			
Alberta	679	679	679	880			
Saskatchewan	123	123	123	166			
Ontario	1466	1466	1466	1553			
Quebec	102	102	102	124			
New Brunswick	27	71	71	85			
Nova Scotia	56	56	56	23			
Prince Edward Is.	2	2	2	34			
Newfoundland	17	17	17	26			
Yukon & Northwest Territories							
Canada	2928	3001	3001	3381			

Note: In 1975 Ontario decided to allow voluntary membership in the Association. In 1976 this policy was rescinded and compulsory membership was again endorsed. Fluctuations in other provinces may be due to the introduction of student membership, different methods of counting and other factors.

TRAINING DENTAL ASSISTANTS

TABLE 26 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	148[13]	52[13]	67[13]	91[13]	56[13]	87[13]	96[13]
British Columbia	147[2]	166[2]	273[2]	279[2]	253[2]	246[2]	228[2]
Alberta	106[1]	103[1]	117[1]	103[1]	160*[1]	100[1]	
Saskatchewan	120[9]	103[9]	102	80			
Ontario	146[5]	150[5]	177[5]	208[5]	200[5]	200[5]	
Quebec	13	7	37	35			
New Brunswick							
Nova Scotia	33	34	33	32			
Prince Edward Is.	30	30	32	28			
Newfoundland							
Yukon & Northwest Territories							
Canada	743	645	838	856			

* In 1980, 60 of these 160 were graduates of a correspondence course at the Northern Alberta Institute of Technology.

SOURCE: [13] Correspondence; Keewatin Community College, Red River Community College, Winnipeg Technical - Vocational High School; July 28, 1982.

CATEGORY: Dental Hygienists

DEFINITION: "Dental hygiene is a health service profession primarily concerned with the prevention of dental disease and the achievement and maintenance of optimum dental health. Hygienists work as clinicians and health educators in a variety of settings, such as private dental offices, community clinics, hospitals, federal, provincial and municipal public health departments, and research."

"As a licensed member of the dental health team, a hygienist's duties are required by provincial legislation. Generally, these include examining and charting oral conditions; exposing and processing dental x-rays; scaling and polishing teeth; placing restorations in prepared cavities; applying decay-preventing agents to the teeth; educating patients and groups in oral health procedures; conducting surveys and compiling statistics; planning and conducting dental health programs in the community; analyzing and counselling in dietary matters; other treatment procedures as permitted by provincial legislation."[13]

---

[13] Correspondence; Director, School of Dental Hygiene, University of Manitoba; May 5, 1980.

TABLE 27 NUMBER OF DENTAL HYGIENISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF DENTAL HYGIENISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	3	5	4	5	7	5	8	8	8	8	8
Eastman	2	3	3	1	2	4	3	3	3	3	3
Interlake	3	5	8	6	6	6	5	5	5	5	5
Norman			1	1	1	1	1	1	1	1	1
Parklands	4	5	4	4	5	5	4	4	4	4	4
Thompson	2	2		2		1	1	1	1	1	1
Westman	3	4	2	1	4	5	4	4	4	4	4
Winnipeg	115	120	132	145	144	164	157	159	161	163	165
Manitoba	132	144	154	165	169	191	183	185	187	189	191

SOURCE: [13] Manitoba Dental Association; Dental Hygienist Registry; June 1976; June 1977; June 1978; June 1979; July 1980; August 1981; May 1982.

TRAINING - DENTAL HYGIENISTS

TABLE 28 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	26	25	20	25	25	25	26
Manitoba	26	25	20	25	25	25	26

Note: The number of students enrolled by year in Program at the University of Manitoba 1976-1982.

	1978/79	1979/80	1980/81	1981/82	1982/83
Year 1	26	26	26	26	26
Year 2	25	25	26	29	25

SOURCE: [14] Correspondence; School of Dental Hygiene; University of Manitoba; May 1976; May 1977; July 1978; August 22, 1979; June 19, 1980; June 23, 1981; August 16, 1982.

TABLE 29 NUMBER OF LICENSED DENTAL HYGIENISTS 1976-1982 BY PROVINCE, CANADA

Province	1976*[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	132[13]	144[13]	154[13]	165[13]	169[13]	191[13]	183[13]
British Columbia	280[2]	310[2]	375	353[2]	415[2]	448[2]	
Alberta	193[1]	175[1]	210[1]	229[1]			
Saskatchewan	36[9]	36[9]	43[9]	49			
Ontario**	706[5]	885[5]	1060[5]	1224[5]	1384[5]	1542[5]	
Quebec*	328	415	616	620			
New Brunswick	21	31	37	41			
Nova Scotia	94	103[14]	133	138			
Prince Edward Is.	19	21	20	18			
Newfoundland	17	18	14	16			
Yukon & Northwest Territories	8	10	16	14			
Canada	1834	2148	2678	2867			

* Data revised as in source.

** The figures for 1976-1978 have been revised, and now reflect the number of Hygienists working in Ontario, rather than registered in Ontario. The figures for 1979-1981 are projected.

SOURCE: [13] Manitoba Dental Association; Dental Hygienist Registry; June 1976; June 1977; June 1978; June 1979; July 1980; August 1981; May 1982.

[14] Statistics Canada, Health Division, Health Manpower Statistics Section; Health Manpower Dental Hygienist 1977; March 1978.

TRAINING - DENTAL HYGIENISTS

TABLE 30 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	26[13]	25[13]	20[13]	25[13]	25[13]	25[13]	26[13]
British Columbia	20[2]	20[2]	20[2]	20[2]	19*[2]	20[2]	20[2]
Alberta	36[1]	32[1]	31[1]	32[1]	35[1]	33[1]	
Saskatchewan							
Ontario	74	256[5]	205[5]	206[5]	190[5]	205[5]	
Quebec	177	180	187	146			
New Brunswick							
Nova Scotia	19	20	20	19			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	353	533	483	448			

* Data revised as per source.

SOURCE: [13] Correspondence; School of Dental Hygiene; University of Manitoba; May 1976; May 1977; July 1978; August 22, 1979; June 19, 1980; June 23, 1981; August 16, 1982.

CATEGORY: Dental Mechanics

DEFINITION: "Dental Mechanic means a person who makes, produces, reproduces, contracts, furnishes, supplies, alters or repairs

1. an upper prosthetic denture or upper dental plate for another person who has no live teeth in his upper jaw, or

2. a lower prosthetic denture or lower dental plate for another person who has no live teeth in his lower jaw, or

3. complete prosthetic dentures or complete dental plates for another person who has no live teeth in his mouth,

and who, for any of those purposes, takes necessary impressions of the inside of the mouth of that other person."[13]

---

[13] Correspondence; Secretary, Dental Mechanics Act Committee; May 12, 1976.

TABLE 31 NUMBER OF DENTAL MECHANICS 1976-1982 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF DENTAL MECHANICS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982**	1983	1984	1985	1986
Central	2	2	2	2	2	2	2	2	2	2	2
Eastman	1	1	1	1	1	1	1	1	1	1	1
Interlake	2	1	1	1	1	1	1	1	1	1	1
Norman						1	1	1	1	1	1
Parklands	1	1	1	1	1	1	1	1	1	1	1
Thompson											
Westman	3	2	3	2	3	3	3	3	3	3	3
Winnipeg	44	47*	46*	45*	43	45	45	46	47	48	48
Manitoba	54	54	55	53	52	54	54	54	55	57	57

* Two of the Winnipeg-based dental mechanics also practice in Westman and Interlake regions respectively.

** The 1982 figures are not available since the Dental Mechanics Registry is not compiled.

SOURCE: [13] Correspondence; Secretary, Dental Mechanics Act Committee; November, 1976; January 31, 1978; November, 1978; May, 1979; May, 1980; May 1981; April 20, 1982.

Training

In Manitoba there are no formal training courses offered for Dental Mechanics. However, there is a three to four year apprenticeship required before a person can write the licensure examinations that are held twice a year.

TABLE 32 NUMBER OF DENTAL MECHANICS 1976-1982 BY PROVINCE, CANADA

Province	1976	1977	1978	1979	1980	1981	1982
Manitoba	54[13]	54[13]	55[13]	53[13]	52[13]	54[13]	
British Columbia	150[2]	137[2]		147[2]		173[2]	
Alberta	104[1]	122[1]	123[1]	127[1]			
Saskatchewan			53[9]				
Ontario	290[5]	296[5]	319[5]				
Quebec							
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	598	609					

SOURCE: [13] Correspondence; Secretary, Dental Mechanics Act Committee; November 1976; January 31, 1978; November 1978; May 1979; May 1980; May 1981; April 20, 1982.

Training

In Canada, Dental Mechanics may take formal training courses in British Columbia, Alberta, or Ontario. The Alberta Institute of Technology graduated 12 students in 1979, 13 in 1980, and 10 in 1981. There were 15 graduates in Ontario in 1978. Information on the number of graduates in British Columbia was unavailable.

CATEGORY: Dental Nurses

DEFINITION: Those persons who perform specific dental treatment upon a written prescription from a dentist and under the supervision of a dentist; recording of health data; exposing and developing of dental radiographs; application and removal of rubber dam; intra-oral administration of local anaesthetic; topical application of medicaments; administration of first aid and the handling of general dental emergencies; patient, classroom and community education in oral health; dental prophylaxis and scaling; topical application of anti-cariogenic agents; application of pit and fissure sealants; prophylactic odontotomy; oral hygiene evaluation (gingival indices and plaque indices); placement of temporary restorations; finishing and polishing of dental restorations; indirect pulp capping; preparing for a placing of permanent restorations in primary and permanent teeth; pulp capping of permanent teeth; surgical removal of deciduous teeth; placement of space maintainers.[13]

---

[13] Correspondence; Executive Director; Dental Health Services; September 3, 1980.

TABLE 33 NUMBER OF DENTAL NURSES 1976-1982 BY MANITOBA HEALTH REGION**

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[14]	1982[13]
Central			3	5	5	6	3
Eastman			3	5	3	2	1
Interlake	4	4	3	5	5	5	3
Norman	1	1	1		2	5	4
Parklands	2	2	4	3	8	6	5
Thompson					2	2	3
Westman			5	8	7	12	10
Winnipeg			1		1	11	11
Manitoba	7	7	20	26	33	49*	40*

* The 1981 and 1982 figures are more complete than previous years' since information was obtained about dental nurses employed with private dentists as well as with the Manitoba Children's Dental Program. In addition to the practising dental nurses, there were another 12 residing in Manitoba in 1981 who were not practising dental nursing; in 1983 this figure was 21.

**Projections unavailable due to the fact that decisions by the Manitoba Children's Dental Program on size are still pending.

NUMBER OF DENTAL NURSES PRACTISING IN CANADA

PROVINCE	1976	1977	1978	1979	1980	1981	1982
Manitoba[13]	7	7	20	26	33	49	40
Saskatchewan[9]	169	202	239				
CANADA	176	209	259				

TRAINING*** DENTAL NURSES-NUMBER OF GRADUATES 1975-1981 IN CANADA

PROVINCE	1976	1977	1978	1979	1980	1981	1982
Saskatchewan*	64	51	50				
Yukon and Northwest Territories	9[15]	9[16]	10[16]	10[16]			
CANADA	73	60	60				

*** Manitoba does not offer a training program for dental nurses. Dental Nurses who are and will be working in Manitoba are trained at the Wascana Institute of Applied Arts in Regina, Saskatchewan. 28 students who received special opportunity bursaries from the Manitoba Department of Continuing Education and Manpower graduated in 1978 and 32 in 1979. However, this financial assistance terminated with the 1979 graduates. In 1980, there was one Manitoba graduate from the Wascana Institute.

SOURCE: [13] Correspondence; Manitoba Dental Services, Department of Health; May 1976; March 1977; May 1978; June 1979; May 1980; May, 1982.

[14] Correspondence; Manitoba Children's Dental Nurses Association; August 17, 1981.

[15] Correspondence; Director, School of Dental Therapy; Medical Services, N.W.T.; May 26, 1976.

[16] Correspondence; Government of N.W.T.; Department of Social Development; September, 1977.

CATEGORY: Dental Technicians

DEFINITION: "Trained to work in dental laboratories in the fabrication, reproduction of fixed or removable prosthetic appliances (dentures), crowns or bridges as prescribed by a dentist."[13]

---

[13] Unpublished material, Dental Health Study Group, Department of Health and Social Development, Province of Manitoba.

TABLE 34 NUMBER OF DENTAL TECHNICIANS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF DENTAL TECHNICIANS 1983-1986 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[14] 1978	[15] 1979	[15] 1980	[16] 1981	[16] 1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands	2	2									
Thompson											
Westman											
Winnipeg	67	67	94	96	97	140	140	142	143	145	147
Manitoba	70	70	94	96	97*	140	140	142	143	145	147

* This figure is estimated since the Manitoba Association of Dental Laboratories is no longer in existence.

Note: A telephone survey of each Dental Laboratory-Dental Technicians-To the Profession was conducted in 1981 and 1982 and thus the statistics are more complete than previous years.

SOURCE: [13] Correspondence; Manitoba Association of Dental Technicians; May 19, 1976; May 26, 1977.

[14] Correspondence; Manitoba Association of Dental Laboratories Incorporated; September 18, 1978.

[15] Correspondence; Former Secretary, Manitoba Association of Dental Laboratories Inc., Winnipeg Crown and Bridge; August 20, 1980.

[16] Telephone Survey; Dental Laboratories-Dental Technicians-To the Profession; June 8, 1981; August, 1982.

TRAINING** - DENTAL TECHNICIANS

TABLE 35 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION*

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	2	5	3	1	3	3	6
Manitoba	2	5	3	1	3	3	6

* Projections not available.

** Training for Dental Technicians may also be on the job. In previous years, on-the-job trainees were not recorded. However, in 1981, a complete telephone survey of each Dental Laboratory of Dental Technicians to the Profession found 15 on-the-job trainees.

SOURCE: [13] Correspondence; Winnipeg Technical-Vocational High School; May 25, 1976; May 30, 1977; August 29, 1978; July 5, 1979; July 9, 1980; July 1, 1981; August 16, 1982.

TABLE 36 NUMBER OF DENTAL TECHNICIANS 1976-1982 BY PROVINCE, CANADA

Province	1976	1977	1978	1979	1980	1981	1982
Manitoba	70[13]	70[13]	94[13]	96[13]	97[13]	140[14]	140[14]
British Columbia	250[2]	246[2]	289[2]	289[2]		325[2]	
Alberta	112[1]	128[1]	136[1]	143[1]			
Saskatchewan	32[9]	33[9]	36[9]				
Ontario	412[5]	410[5]	421[5]	453[5]	470[5]	487[5]	
Quebec							
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada							

SOURCE: [13] Correspondence; Manitoba Association of Dental Technicians; May 19, 1976; May 26, 1977; Manitoba Association of Dental Laboratories Inc.; September 18, 1978.

[14] Telephone Survey; Dental Laboratories-Dental Technicians-To the Profession; June 8, 1981; August 1982.

TRAINING - DENTAL TECHNICIANS

TABLE 37 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[6]	1977[6]	1978[6]	1979[6]	1980	1981	1982
Manitoba	2[13]	5[13]	3[13]	1[13]	3[13]	3[13]	6[13]
British Columbia*	20[2]	12[2]	15[2]	15[2]	11[2]	12[2]	12[2]
Alberta	8[1]	10[1]	12[1]	13[1]	13[1]	10[1]	
Saskatchewan	16[9]	17[9]	23[9]				
Ontario	14[5]	15[5]	14[5]	12[5]	14[5]	15[5]	
Quebec	60	90	90	90			
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada							

* These data include graduates from both Dental Technicians and Dental Mechanics educational programs.

SOURCE: [13] Correspondence; Winnipeg Technical-Vocational High School; May 25, 1976; July 9, 1980; May 30, 1977; August 29, 1978; July 5, 1979; July 9, 1980; July 2, 1981; August 1982.

CATEGORY: Dentists

DEFINITION: Diagnose and treat diseases, injuries and malformations of teeth, gums and related oral structures and prescribe and administer preventive procedures:

Examine teeth, gums and other tissues, using x-rays and dental equipment. Diagnose condition and plan treatment. Administer local or general anaesthetic. Fill cavities with amalgam, silver, gold or other material. Replace portion of tooth crown with inlay or artificial crown. Perform minor oral surgery, including extractions of erupted and impacted teeth. Take dental impressions. Design bridgework and partial or complete dentures. Construct dental appliances or write specifications for dental technician. Clean teeth. Instruct patients in oral hygiene to prevent dental problems. Monitor growth pattern of patient's teeth. Refer patients to specialists. (Revised C.C.D.O. '80, p.60)

TABLE 38 NUMBER OF DENTISTS 1976-1982 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF DENTISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983[3]	1984[3]	1985[3]	1986[3]
Central	14	13	13	13	13	15	17	12	11	11	11
Eastman	11	10	10	8	11	10	10	9	8	10	11
Interlake	11	9	11	13	15	15	14	16	16	18	18
Norman*	14	22	22	6	5	5	5	5	6	6	9
Parklands	11	10	11	17	16	16	15	21	24	24	28
Thompson*				12	12	10	10	10	11	11	11
Westman	28	29	29	31	33	32	27	32	32	31	31
Winnipeg	280	292	291	301	317	327	328	322	326	329	329
Manitoba	369	385	387	401	422	430	426	427	434	440	448

* The figures for the Thompson region from 1976 to 1978 are included under the Norman Region.

SOURCE: [13] Manitoba Dental Association Directory; 1976-1982.

TRAINING DENTISTS

TABLE 39 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED* NUMBER OF GRADUATES 1983-1986 BY MANITOBA REGION.[14]

Region	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	26	27	23	27	32	27	27	34	24	33	
Manitoba	26	27	23	27	32	27	27	34	24	33	

* These projections are based on the number of students enrolled in first and third years during the 1980-1981 academic year.

SOURCE: [14] Correspondence; Faculty of Dentistry, University of Manitoba; May 1976; May 1977; July 1978; May 8, 1979; July 1980; July 1981; August 30, 1982.

TABLE 40 NUMBER OF DENTISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	369[13]	385[13]	387[13]	401[13]	422[13]	430[13]	426[13]
British Columbia	1399[2]	1437[2]	1483[2]	1557[2]	1605[2]	1670[2]	
Alberta	783[1]	845[1]	898[1]	937[1]			
Saskatchewan	270[9]	290[9]	297[9]	310			
Ontario	4038	4170[5]	4151[5]	4186[5]	4221[5]	4255[5]	
Quebec	2117	2117	2180	2362			
New Brunswick	164	174	204	180			
Nova Scotia	270	296	304	311			
Prince Edward Is.	42	55	44	42			
Newfoundland	103	119	113	111			
Yukon & Northwest Territories	20	22	19	25			
Canada	9448	9910	10080	10422			

SOURCE: [13] Manitoba Dental Association Directory; 1976-1982.

TRAINING - DENTISTS

TABLE 41 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[6]	1979[6]	1980	1981	1982
Manitoba	26[13]	27[13]	23[13]	27[13]	32[13]	27[13]	27[13]
British Columbia	39[2]	35[2]	38*[2]	41*[2]	36*[2]	39[2]	37[2]
Alberta	39[1]	42[1]	51[1]	47[1]	44[1]	46[1]	
Saskatchewan	15[9]	11[9]	10[9]	13			
Ontario	175	175[5]	180[5]	170[5]	187[5]	176[5]	
Quebec	139	141	142	146			
New Brunswick							
Nova Scotia	29	29	25	24			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	460	460	469	468			

* Data revised as in source.

SOURCE: [13] Correspondence; Faculty of Dentistry, University of Manitoba; May 1976; May 1977; July 1978; August 1979; July 1980; July 1981; August 30, 1982.

CATEGORY: Dietetic Aides

DEFINITION: Dietary aides are employed by hospitals and institutional cafeterias and kitchens to carry out routine food dispensing, simple food preparation, cleaning of cafeteria equipment, and tray assembling. Trained "on-the-job" and work under the direct supervision of a dietitian or dietary technician. (Revised C.C.D.O. '80, p. 19)

TABLE 42 NUMBER OF DIETETIC AIDES 1976-1982 BY MANITOBA REGION, MANITOBA

Region	1976[8]	1977 *	1978[8]	1979[13]	1980[13]	1981[13]	1982 ***[13]
Central	211		234	186	232	238	119
Eastman	100		108	76	105	93	106
Interlake	128		138	140	89	115	46
Norman	105		97	74	18	20	3
Parklands	117		135	99	69	120	78
** Thompson					37	37	3
Westman	352		359	278	223	251	173
Winnipeg	1527		1543	1220	1088	1145	344
Manitoba	2540		2614	2073	1861	2019	872

* Data was unavailable for 1977. The hospitals and personal care homes reported on a fifteen month basis rather than on an annual basis as usual.

** The Thompson figures for 1976, 1978 and 1979 are included under the Norman region.

*** It was not possible to identify the number of dietetic aides employed in hospitals in 1982. It is, therefore, not possible to project the number of dietetic aides for 1983-1986.

Note: Besides Dietitians, Dietetic Aides, Cooks and Supervisors, the dietary field also employs certain manpower groups entitled "Dietetic Technologists and Dietetic Technician." These persons are usually graduates from a two year course at a community college level. There are relatively few Dietetic Technologists and/or Technicians employed in Manitoba currently.

SOURCE: [13] Unpublished survey results; Department of Health; August 20, 1979; August 26, 1980; August 21, 1981; August 1982.

Training

Training is done on an on-the-job basis. There are no formal training courses available in Manitoba at the present time.

Note: Information on the supply and training of Dietetic Aides across Canada was not available.

CATEGORY: Dietitian

DEFINITION: Plan and supervise food service programs in governmental, institutional and commercial establishments to provide nutritionally adequate quality food:

Plan diets and menus and evaluate clients' acceptance. Plan and submit budget and manage and control operating costs. Establish and maintain standards of food production and service, sanitation, safety and security. Supervise workers and direct efficient use of personnel and equipment. Institute measures to improve efficiency and quality of food service system. Plan, conduct and evaluate orientation and in-service training programs. Determine food, equipment and supply requirements. Administer established personnel policies. Plan layout designs and determine equipment requirements for new or renovated food service facilities. Prepare material on nutritional value of foods, methods of preparation and recipes, if required. (Revised C.C.D.O. '80, p. 16)

TABLE 43 NUMBER OF DIETITIANS ACCORDING TO MEMBERSHIP IN ASSOCIATION 1976-1982 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF DIETITIANS ACCORDING TO MEMBERSHIP IN ASSOCIATION 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	1	2	5	5	8	9	6	6	6	6	6
Eastman	1	2	2	3	1		3	3	3	3	3
Interlake	3	3	3	3	6	4	2	2	2	2	2
Norman			1	3	2	1	2	2	2	2	2
Parklands	1	1	3	3	3	3	3	3	3	3	3
Thompson											
Westman	2	5	4	3	6	8	10	10	10	10	10
Winnipeg	81	102	120	109	108	117	121	123	124	125	127
Manitoba	89	115	138	129	134	143	147	149	150	151	153

SOURCE: [13] Correspondence; Registrar, Dietetic Association of Manitoba; July 1976; March 1977; April 1978; May 1979; May 1980; May 1981; April 27, 1982.

TRAINING - DIETITIANS

TABLE 44 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[14] 1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	34	26	24	17	9	15	24*
Manitoba	34	26	24	17	9	15	24

* Of the 24 graduates, 24 applied for internship and 15 were accepted. In addition, 6 special students applied for internship and one was accepted.

SOURCE: [14] Correspondence; Faculty of Human Ecology, University of Manitoba; July 1976; May 1977; July 1978; July 5, 1979; June 19, 1980; September 1981; August 17, 1982.

TABLE 45 NUMBER* OF DIETITIANS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[14]	1979[14]	1980[14]	1981[14]	1982
Manitoba	158	174	186	178	184	143[13]	147[13]
British Columbia	241[2]	376[2]	400	437[2]	456	444[2]	
Alberta	199[1]	205[1]	229[1]	239[1]	319	368	
Saskatchewan	83[9]	94[9]	98[9]	106	114	121	
Ontario	916[5]	974[5]	1013[5]	1038[5]	1088[5]	1451	
Quebec	315	327	324	349	356	359	
New Brunswick	100	108	117	134	128	137	
Nova Scotia	199	201	211	228	231	245	
Prince Edward Is.	29	27	31	35	34	37	
Newfoundland	37	37	42	48	60	65	
Yukon & Northwest Territories							
Canada	2277	2523	2695	2792	2970	3370	

* Please note that data differ from the data used in the regional breakdown for Manitoba. In Manitoba you must be a member of the C.D A. to be a member of the D.A. of Manitoba; however, this does not apply in reverse. As well, it is not always necessary for a dietition to hold a membership with either association, depending on where she/he is employed. The C.D.A. has more Manitoba members than the D.A. of Manitoba, and therefore provides a more accurate count of dietitians in Manitoba.[14]

SOURCE: [13] Correspondence; Registrar; Dietetic Association of Manitoba; August 14, 1979; May 1981; August 1982.

[14] Correspondence; Executive Director, The Canadian Dietetic Association; May 11, 1979; August 8, 1980; August 19, 1981; September 1, 1982.

TABLE 46 NUMBER OF GRADUATES OF DIETETIC INTERNSHIP PROGRAMS 1976-1982 BY PROVINCE, CANADA AND PROJECTED NUMBER OF GRADUATES 1983-1986 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[13]	1980[13]	1981[13]	1982
Manitoba	34[14]	26[14]	24[14]	17[14]	9[14]	15[14]	24[14]
British Columbia	25[2]	25[2]	31[2]	28[2]	29*[2]	35[2]	35[2]
Alberta	26	24	25	27	27	39	[1]
Saskatchewan	17[9]	10[9]	5	5	5	6	
Ontario	188[5]	116[5]	77	156[5]	157[5]	93	
Quebec	96	90	92	**57	**85		
New Brunswick	4	4	9	9	8	8	
Nova Scotia	21	20	12	11	8	10	
Prince Edward Is.							
Newfoundland			2	2	5	4	
Yukon & Northwest Territories							
Canada	411	315	277	312	337		

* Data revised as per source.

** These are graduates from coordinated programs (ie) with clinical experience integrated into the academic programs.

SOURCE: [13] Correspondence; Executive Director, The Canadian Dietetic Association; August 8, 1980; August 19, 1981; September 1, 1982.

[14] Correspondence; Faculty of Home Economics; University of Manitoba; July 1976; May 1977; July 1978; July 1979; September 1981; April 27, 1982.

CATEGORY: Electrocardiographic Technicians

DEFINITION: "Electrocardiograph Technicians (E.K.G. Technicians or E.C.G. Technicians) operate electronic instruments which record, on graphic paper, the electrical impulses emitted by the patient's heart. E.K.G. Technicians work in health institutions, clinics and physicians' offices.

E.K.G. Technicians function in the developing field of science and medicine which applies electronic principles to the study of the human body and its functioning. Electrocardiography is used to assess heart function and diagnose various kinds of heart disease and disorders.

An Electrocardiogram is a non-invasive diagnostic test used to assess the conduction system of the heart. Training of E.K.G. Technicians is both academic and "on the job" and lasts one year. A prerequisite is high school matriculation with preference for courses in social and physical sciences. Upon completion of the basic training program at the end of one year, and after successfully completing written and practical application, a Technician becomes a Registered Member of the Canadian Society of Cardiology Technicians.

Interested persons should like working with people and must have a compassion for the ill. A certain degree of manual dexterity is required to manipulate and adjust the equipment. Interest and awareness are required to ensure that all equipment is functioning efficiently and the recordings are accurate.

There is an increasing demand for Registered Technicians in the field of Electrocardiography. Within this field there are numerous phases of discipline which will maintain the interest of the Technician. He/she may be required to participate in procedures such as stress testing, phonocardiograms, vectorcardiograms, pacemaker tests, transmissions and computer systems.

This is an ideal field of endeavour for any ambitious individual desiring to improve their status in life while helping others."[12]

---

13. Correspondence, Cardiology Technicians Association; December 1, 1976.

TABLE 47 NUMBER OF CARDIOLOGY TECHNICIANS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF CARDIOLOGY TECHNICIANS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	4	5	4	8	12	12	7	7	7	7	7
Eastman	2	4	4	5	7	7	3	3	3	3	3
Interlake				5	6	7	2	2	2	2	2
Norman		4	3	6	5	4					
Parklands	2	4	4	10	9	7	8	8	8	8	8
Thompson							1	1	1	1	1
Westman	12	18	20	21	20	28	15	15	15	15	15
Winnipeg	73	76	64	70	75	79	79	80	81	82	83
Manitoba	93	111	99	125	134	144	115	116	117	118	119

SOURCE: [13] Correspondence; Cardiology Technicians Association of Manitoba; July 1976; June 1977; July 1978; August 1979; June 1980; December 1981; September 1982.

Supply Information Across Canada

Data on the supply of Electrocardiograph Technologists across Canada were only available from the province of Ontario as follows:

Number of Electrocardiograph Technologists in Ontario 1975-1979

	1975[5]	1976[5]	1977[5]	1978[5]	1979*
Ontario	500	526	673	700	719[14]

*Data revised according to Correspondence from Cardiology Technicians Association of Ontario.

SOURCE: [13] Correspondence; President, Cardiology Technicians Association of Ontario; June 24, 1980.

TRAINING - CARDIOLOGY TECHNICIANS

TABLE 48 NUMBER OF GRADUATES* 1976-1982 BY MANITOBA HEALTH REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981**	1982[13]
Central							1
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	15	16	18	43	34		9
Manitoba	15	16	18	43	34		10

* Includes Correspondence Students from Quebec, as Quebec does not have a recognized course. There are approximately 6 graduates each year from Quebec.

** 1981 data unavailable

Note: Training for Cardiology Technicians is at the Health Sciences Centre and St. Boniface General Hospital in Winnipeg. Examinations are written in either April or October, so the duration of the course is 1 year to 18 months depending upon when a candidate enrolled. National examinations are written at one centre with a registered Cardiology Technician Examiner presiding.

SOURCE: [13] Correspondence; Cardiology Technicians Association; August 1976; July 1978; August 1979; July 1980; September 1982.

CATEGORY: Electroencephalographic (EEG) Technicians

DEFINITION: "Operates electroencephalograph equipment to measure and record electrical impulses of the brain for the evaluation of brain functions:

Attaches electrodes to specified area of patient's head, and electrode terminals to switchbox. Explains procedure to patient. Turns selector switches to obtain tracings of electrical impulses from various parts of the brain. Makes appropriate notes on the recording graph. Scans the finished recordings for possible false readings. Observes physical changes in patient, such as convulsive seizure which may require immediate medical attention. Adjusts controls to ensure instrument is functioning properly and that there is no outside interference. May operate, or assist with operating special electronic equipment, such as transducers and oscilloscopes to measure midline position of body organ and to convert sound waves into audible signals." (Revised C.C.D.O. '80, p.90)

TABLE 49 NUMBER OF ELECTROENCEPHALOGRAPH TECHNICIANS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF ELECTROENCEPHALOGRAPH TECHNICIANS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[14]	1980[14]	1981[14]	1982[14]	1983	1984	1985	1986
Central	1	1	1								
Eastman											
Interlake	1	1	1								
Norman				1	1	1	1	1	1	1	1
Parklands											
Thompson											
Westman	1	1	1	**4	3	2	2	2	2	2	2
Winnipeg	12	16*	11	10	14	14	14	14	15	15	15
Manitoba	15	19	17	14	17	17	17	17	18	18	18

* Includes one student at St. Boniface Hospital.

** Includes one student.

SOURCE: [13] Correspondence; Health Sciences Centre; April 1976; May 1977; July 1978; Victoria General Hospital; St. Boniface Hospital; Deer Lodge Hospital; Manitoba School for Retardates; Brandon Mental Health Centre; Brandon General Hospital; Selkirk Mental Health Centre; May 1977; August 1978.

[14] Unpublished survey results; Department of Health; August 20, 1979; August 26, 1980; August 1981; August 1982.

TRAINING - ELECTROENCEPHALOGRAPH TECHNICIANS

TABLE 50 NUMBER OF TRAINEES* 1976-1982 BY MANITOBA HEALTH REGION**

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	2	2			1	2	1
Manitoba	2	2			1	2	1

* Training for Electroencephalograph Technicians is of a two year duration. The first year of training is taken at the Health Sciences Centre and one Exam is written at the end of the year. The second year of training may be taken outside of the Health Sciences Centre where the candidate may be under no supervision or semi-supervision. Another examination is written at the end of the second year.

** It is not possible to project the number of trainees as the training is done on a "supply and demand" basis. If a position for an EEG technician becomes available at the Health Sciences Centre or one of the other large hospitals, a person is trained in order to fill that particular vacancy.[14]

SOURCE: [14] Correspondence; EEG Laboratory; Health Sciences Centre; August 1976; May 1977; July 1978; July 5, 1979; July 1980; June 1981; August 16, 1982.

TABLE 51 NUMBER OF ELECTROENCEPHALOGRAPH TECHNICIANS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	15[13]	19[13]	17[14]	14[14]	17[14]	17[14]	17[14]
British Columbia	37	38	36	35			
Alberta	14	14	15	17			
Saskatchewan	21	17	19	22			
Ontario	72[5]	77[5]	75[5]	75[5]	75[5]	75[5]	
Quebec	110	108	117	109			
New Brunswick	6	6	7	7			
Nova Scotia	11	11	13	13			
Prince Edward Is.	1	1					
Newfoundland	11	10	11	12			
Yukon & Northwest Territories							
Canada	316	301	310	304			

SOURCE: [13] Correspondence; Health Sciences Centre; April 1976; May 1977; July 1978; Victoria General Hospital; St. Boniface Hospital; Deer Lodge Hospital; Manitoba School for Retardates; Brandon Mental Health Centre; Brandon General Hospital; Selkirk Mental Health Centre; May 1977; August 1978.

[14] Unpublished survey results; Department of Health; August 20, 1979; August 1980; August 1981; August 1982.

Training

Information on the training of EEG technologists across Canada was not available.

CATEGORY: Emergency Health Care Workers

DEFINITION: First Aid Attendants - Provide first aid services for injured or ill at commercial establishments, industrial plants, construction sites, mines and accidents. Examine patient to determine need for professional care. Arrange for medical attention and transportation of patient to hospital. Apply artifical respiration or administer oxygen in cases of suffocation or asphyxiation. Apply pressure to stop bleeding, immobilize fractures and treats patient for shock. Disenfect and bandage minor cuts and bruises. Record treatment. Clean and tidy work area (Revised C.C.D.O. p. 145)

Ambulance Attendants - Respond to any situation where injury or illness has been reported, and there to function as an extension of the emergency team to assess and stabilize the scene and the patient(s) to the best of their ability. Subsequently, they provide transport to a hospital or medical facility.[13]

---

[13] Correspondence; Manager, Emergency Health and Ambulance Services; September 8, 1982.

There are 1440 licensed ambulance attendants in rural Manitoba and 100 in Metro Winnipeg in 1982.[13] Data are not available for years prior to 1982.

Ambulance Attendants must complete the 8 hour St. John Ambulance First Aid Course to become licensed.

In 1982 the Emergency Health and Ambulance Services initiated a 90 hour "First Responder" program to train ambulance attendants in all basic life support measures (e.g. Cardio-pulmonary resusitation, splinting, etcetera). To date, 20 rural ambulance attendants have completed the course. In addition, 144 firefighters in the City of Winnipeg have also completed this course. All firefighters must also complete the St. John Ambulance First Aid Course.

---

[13] Emergency Health and Ambulance Services; September 8, 1981; November 5, 1982.

CATEGORY: Health Educator

DEFINITION: A University graduate with specific training in and/or skills in communication and adult education involved in the preparation and implementation of Health promotion programs.[13]

---

[13] Correspondence, Leslie Donald, Office of Education Services, Department of Health and Social Development; July 13, 1976.

TABLE 52 NUMBER OF HEALTH EDUCATORS* 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF HEALTH EDUCATORS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	1	1		1	1			1	1	1	1
Eastman	1	1	1	2	1	1	1	2	2	2	2
Interlake	1	1	1	1	1	1	1	1	1	1	1
Norman	1	2	1	3	2	2	2	2	2	2	2
Parklands											
Thompson											
Westman	2	4	2	3	2	2	2	2	2	2	2
Winnipeg	15	12	11	13.5	13.5	13.5	14	14	14	14	14
Manitoba	21	21	16	23.5	20.5	19.5	19	21	21	21	21

SOURCE: [13] Correspondence; Director, Education and Library Services; Manitoba Department of Health; June 1976; March 1977; April 1978; May 1979; May 1980; June 1981; April 1982.

* Medical Services Branch employs Indian Community Health Representatives who teach and encourage improved health practices to their community during home visits, in the schools, and to community groups such as their Band Councils and Health Committees:

*Number of Community Health Representatives By Region 1977-1982[14]

Region	1977	1978	1979	1980	1981	1982
Central	2	1	5	5	4	6
Eastman	15	12	20	18	17	21
Interlake	8	7	10	8	11	12
Norman	5	4	2	2	6	3
Parklands	4	5	4	4	5	7
Thompson	24	20	27	26	29	28
Westman	4	1	6	4	7	6
Winnipeg	2	2	3	3	1	1
Manitoba	64	52	77	70	80	84

*Data have been revised.

SOURCE: [14] Correspondence; Information and Library Clerk, Medical Services Branch, Health and Welfare Canada, Manitoba Region; April 1977; May 1978; August 1979; May 1980; May 1981; April 29, 1982.

Supply Across Canada

Information on the supply and distribution of Health Educators in other provinces was not available.

Training[13]

There are basically three kinds of Health Educators as follows:

1. *School Health Educator - usually a person with teacher training who has an interest in health, often via physical education. There are none in Manitoba at the present time.

   Dalhousie and Waterloo Universities have training at the Baccalaureate and Masters level for School Health Educators.

2. Inservice Educator - This is usually a hospital based person with a Nursing degree or diploma. These people are responsible for inservice training of hospital staff and some patient education, usually in special areas, eg. diabetics, heart disease, etc.

3. *Public Health Educator - Two of the health educators employed by the Manitoba Department of Health and Social Development have a Masters Degree in Public Health Education.

   The other health educators have come from various educational backgrounds - Bachelor of Arts, Bachelor of Science, Home Economics, Nursing Degree or Diploma. After entering the job these health educators have been given on-the-job training. Upgrading courses are offered throughout the year as well.

   One of the health educators employed by the Medical Services Branch, Health and Welfare Canada is currently away on educational leave to obtain a Masters degree in Public Health Education (M.P.H.)

*In the Fall of 1978, the Faculty of Education, University of Manitoba introduced a graduate studies program in School Health Education and/or Community Health Education at the pre-Master's and Master's levels. Currently, approximately 40 students are enrolled at the pre-Master's level and 20 - 25 at the Master's level, (2 of whom will graduate in the Fall of 1982). The maximum number of students accepted into the program is quite flexible. A total of approximately 65 students are enrolled in the 1982-83 academic year.[14]

SOURCE: [13] Correspondence; Director, Education and Library Services; May 1975; April 1978.

[14] Correspondence; Faculty of Education, University of Manitoba; May 1980; May 1981; August 17, 1982.

CATEGORY: Health Record Administrators and Technicians

DEFINITION: "The Health Record Administrator is responsible for providing a system for acquiring, analyzing, storing and retrieving information so that it will be readily available when needed.

The Health Record Administrator serves as a key member of the modern medical team and has the opportunity to innovate and develop patient information systems to enable:

> Patients to be cared for adequately, medicine to be taught, research to be conducted, epidemics to be controlled, drugs to be tested, health care statistics to be compared.

Upon the accuracy and thoroughness of the Health Record Administrator depends the health facility's ability to prove to itself and the public that it has done its job well."

"Health Record Technicians are specially trained assistants to Health Record Administrators, carrying out many technical activities within the medical record department - typing medical information - preparing statistical reports - reviewing medical records - supervising clerical personnel - working with doctors, nurses, and other health professionals on medical research projects.

In addition Health Record Technicians may be employed as Director of Medical Record Departments in smaller hospitals and nursing homes."[13]

---

[13] Correspondence; Manitoba Health Record Association; May 30, 1975.

TABLE 53 NUMBER* OF HEALTH RECORD ADMINISTRATORS AND HEALTH RECORD TECHNICIANS 1976-1982 MANITOBA HEALTH REGION, AND PROJECTED NUMBER OF HEALTH RECORD ADMINISTRATORS AND HEALTH RECORD TECHNICIANS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	12	12	16	13	15	11	14	14	14	14	15
Eastman	6	5	10	9	11	8	8	8	9	9	9
Interlake	10	12	15	9	12	9	8	8	8	8	9
Norman	3	4	6	5	2	5	1	1	1	1	1
Parklands	7	7	6	4	6	9	9	9	9	9	9
Thompson	7	6	6	5	7	6	5	5	5	6	6
Westman	21	22	21	22	22	23	20	20	20	20	20
Winnipeg	55	78	81	91	77	73	70	71	72	73	73
Manitoba	121	146	161	158	152	144	136	136	138	140	142

* Included in this number are members who are indicated as being inactive. In addition, students are also included in the data.

SOURCE: [13] Correspondence; Manitoba Health Record Association; June 18, 1976; June 30, 1977; July 6, 1978; September 1979; September 1980; August 20, 1981; May 4, 1981.

TRAINING - HEALTH RECORD TECHNICIAN

TABLE 54 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	19	24	26	24	24	25	31
Manitoba	19	24	26	24	24	25	31

Note: The Canadian Hospital Association offers a correspondence course for Health Record Technicians. This course is of a nine month duration, during which time a person must spend a period of time in a medical record department of a hospital selected for the purpose by the Canadian Hospital Association. Eleven of the 31 students graduating in 1982 were graduates of this correspondence course.[14]

SOURCE: [13] Correspondence; Red River Community College; May 28, 1976; May 1977; July 1978; September 1979; July 1980; June 1981; August 17, 1982.

[14] Correspondence; Manitoba Health Record Association; September 1979; September 1980; August 1981; August 1982.

Training

There is no training program offered in Manitoba for Health Record Administrators.

TABLE 55 NUMBER OF HEALTH RECORD ADMINISTRATORS AND TECHNICIANS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	121[13]	146[13]	161[13]	158[13]	152[13]	144[13]	136[13]
British Columbia	228[2]	232[2]	244	260[2]		209[2]	
Alberta	317	341	356	343			
Saskatchewan	114[9]	128[9]	168	161			
Ontario	640[5]	729[5]	816[5]	705[5]	785[5]	855[5]	
Quebec	296	288	237	214			
New Brunswick	64	57	59	58			
Nova Scotia	108	113	126	124			
Prince Edward Is.	4	4	9	7			
Newfoundland	20	24	21	16			
Yukon & Northwest Territories							
Canada	1912	2062	2197	2046			

SOURCE: [13] Correspondence; Manitoba Health Record Association; June 1976; June 1977; July 1978; September 1979; September 1980; August 1981; May 1982.

TRAINING - HEALTH RECORD ADMINISTRATOR

TABLE 56 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba*							
** British Columbia	5[2]	4					
Alberta	14[1]	14[1]	13[1]	19[1]	18[1]	14[1]	
Saskatchewan	7	10[9]	9	11			
Ontario	26[3]	12[3]	28[3]	22[3]			
Quebec	24	56	51	36			
New Brunswick							
Nova Scotia		6	5	6			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	76	102	106	94			

* Manitoba does not offer training for Health Record Administrators.

** There will be approximately 30 graduates from a program entitled "Health Information Sciences" in 1983.

TRAINING - HEALTH RECORD TECHNICIANS

TABLE 57 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978	1979	1980	1981	1982
Manitoba	19[13]	24[13]	26[13]	24[13]	24[13]	25[13]	31[13]
British Columbia*	15[2]	16[2]	9[2]	12[2]	16[2]	16[2]	16[2]
Alberta	17[1]	17[1]	8[1]	7[1]	12[1]	17[1]	
Saskatchewan		7[9]	9[9]	4[9]			
Ontario	28	33[5]	34[5]	27[5]	33[5]	33[5]	33[3]
Quebec							
New Brunswick							
Nova Scotia			18	19			
Prince Edward Is.							
Newfoundland							
Correspondence	83	76	85	61			
Canada	162	173	171	135			

* The B.C. training program for Health Record Technicians is entitled "Health Information Technology". The 1980-1982 data for B.C. has been revised.

SOURCE: [13] Correspondence; Red River Community College; May 1976; May 1977; July 1978; September 1979; July 1980; June 1981; August 1982.

CATEGORY: Health Services Administrators

DEFINITION: "Concerned with carrying out managerial and administrative activities in health services areas of hospitals, industries, clinics, government health agencies and similar establishments, dietetics volunteer services and admission and discharge of patients from hospitals. (Revised C.C.D.O. '80, p.24)

TABLE 58 NUMBER OF HEALTH SERVICES ADMINISTRATORS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF HEALTH SERVICES ADMINISTRATORS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	16	16	24	27	17	18	22	22	22	23	23
Eastman	11	12	16	18	10	11	12	12	13	13	13
Interlake	11	11	13	17	11	12	15	15	15	16	16
Norman	3	2	8	6	5	4	5	5	5	5	6
Parklands	9	9	18	18	9	8	12	12	12	12	12
Thompson	7	8	5	5	5	5	7	7	7	8	8
Westman	31	37	40	54	28	31	34	34	34	35	35
Winnipeg	38	42	42	49	42	39	47	48	48	49	49
Manitoba	126	137	161*	194*	127	128	154*	155	156	161	162

* These figures are slightly larger than the actual number of Health and Hospital Administrators in Manitoba due to the fact that some administrators are employed by more than one institution and therefore have been counted twice.

SOURCE: [13] Correspondence; Director of Accounting Services, Manitoba Health Organizations Inc.; July 1976; April 1977; March 1978; May 17, 1979; May 9, 1980; May 26, 1981; May 11, 1982.

Training

Statistical information on the training of Health Service Administrators in Manitoba was unavailable.

Information on Health and Hospital Administrators Educational Background in Manitoba[13]

There are 154 administrators in Manitoba including hospitals, personal care homes and other health care institutions employing health and hospital administrators.

A percentage of the administrators have graduated from University programs with a master's degree or equivalent in health services or hospital administration. A large number of other health services administrators have graduated from a one or two year correspondence program in personal care or hospital organization and management. The remainder of the administrators have no specific educational preparation in health services management.

TABLE 59 NUMBER OF HEALTH SERVICES ADMINISTRATORS 1976-1982 BY PROVINCE, CANADA

Province	*[4] 1976	*[4] 1977	*[4] 1978	[4] 1979	1980	1981	1982
Manitoba	126[13]	137[13]	161[13]	194[13]	127[13]	128[13]	154[13]
British Columbia	123	132	156	204			
Alberta	185	207	233	259			
Saskatchewan	126[9]	57	67	77			
Ontario	1570[5]	1554[5]	1544[5]	1548[5]	1554[5]	1559[5]	
Quebec	77	85	96	97			
New Brunswick	51	63	64	86			
Nova Scotia	43	70	86	92			
Prince Edward Is.	10	7	9	9			
Newfoundland	32	34	52	59			
Yukon & Northwest Territories	5	8	13	12			
Canada	1879	2354	2481	2637			

* Data taken from this source pertains to the number of members of the Canadian College of Health Services Executives.

SOURCE: [13] Correspondence; Director of Accounting Services Manitoba Health Organization Inc., July 1976; April 1977; March 1978; May 17, 1979; May 9, 1980; May 26, 1981; May 11, 1982.

TRAINING - HEALTH SERVICES ADMINISTRATORS

TABLE 60 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba							
British Columbia	17[2]	5[2]	6[2]	15[2]	8[2]	19[2]	15[2]
Alberta	7[1]	6[1]	7[1]	9[1]	12*[1]	14*[1]	
Saskatchewan		72	61	85			
Ontario	30[5]	30[5]	60[5]	50[5]	52[5]	52[5]	
Quebec	63	48	66	57			
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	127	161*	200	216			

* In addition to the 12 who graduated with a Master's Degree in Health Services Administration, there were 3 graduates of a Post Graduate Diploma in Health Services Administration; in 1981, in addition to the 14, there were 5 graduates of the Post Graduate Diploma.

CATEGORY: Health Sciences Librarians

Note: There are three categories within Health Library Personnel:

1. Professional Librarian
2. Library Technician
3. Other

DEFINITION:

1. Professional Librarians - "Develops, organizes, and maintains collection of library materials in special fields of knowledge (in this case medicine, nursing and allied health).

   Selects, evaluates and disseminates specialized information and integrates and adapts information resources to the needs of a particular institution or section of library. Collects books, pamphlets, periodicals, technical reports, government documents, patents, microfilms, maps, records, photographs, clippings and any other relevant materials to serve clients. Gathers information relating to business of company, institution, or organization and organizes material for convenient retrieval. Classifies and catalogues each item with suitable descriptions. Ensures that material is of good quality and up-to-date." (C.C.D.O. 1971, p. 104)

2. Library Technician - "Assists in developing, organizing and maintaining a collection of library material by using a specialized knowledge of library systems and methods in performing any combination of the following duties: searches bibliographic data to choose books, periodicals, and microfilms. Prepares acquisition lists, and order library material. Records title, author, description and contents of newly acquired material on catalogue cards. Assigns book number to material, and prepares shelf listings. Answers clientele's questions involving use of reference sources. Prepares publicity for, or assembles and arranges displays of books and other library material. Describes or demonstrates procedures to readers for searching catalogue files and shelf collections to obtain reading material. Arrange for inter- library loans." (C.C.D.O. 1971, p. 105)

3. Other - "Provides support services in the areas of reference, circulation, technical services (cataloguing and acquisitions).[13]

---

[13] Correspondence; Chief Health Librarian; Manitoba Department of Health and Community Services Library; September 13, 1979.

The distribution of Health Libraries throughout the Manitoba Health and Community Services regions is as follows:*[13]

Region	1979	1980	1981	1982
Central	2	2	3	5
Eastman			1	1
Interlake	2	1	3	2
Norman	1			
Parklands		1	1	1
Thompson				
Westman	4	4	6	5
Winnipeg	19	19	24	24
Manitoba	28	27	38	38

The number of employees presently working in Health Libraries in Manitoba** are as follows:[12]

Professional Librarians	- 12.00
Library Technicians	- 21.75
Other	- 35.75

* Only those institutions that have memberships in the Manitoba Health Libraries Association are represented.

** Equivalent full or half-time positions, not number of positions.

Note: The Manitoba Health Libraries Association (M.H.L.A.) exists to "promote the provision of quality service to the health community in Manitoba by communication and mutual assistance. Membership in the Association is not mandatory for health library personnel in the Province and is open to all persons or institutions interested in the aims of the Association."[14]

SOURCE: [13] Correspondence; Manitoba Health Libraries Association; July 18, 1980; July 21, 1981; July 29, 1982.

[14] Manitoba Health Libraries Association; Constitution and Bylaws.

EDUCATIONAL QUALIFICATIONS

1. **Professional Librarians - "Until the early 1970's professional librarians were required to have an undergraduate degree followed by one year of study at an accredited library school to obtain a Bachelor of Library Science (B.L.S.) degree. As a result of recent changes at Canadian universities and their library schools, librarianship is currently studied at the Master's level. An undergraduate degree followed by two years of study at an accredited library school is required to obtain a Master of Science (M.L.S.) degree."[15]**

2. **Library Technician - "A high school diploma followed by one year of study in registered library technician's program is required to obtain a library technician's certificate."[15]**

3. **Other - "There are a number of individuals working in and/or organizing health libraries in the Province who are neither library technicians or professional librarians. Some have taken several library related courses and have on-the-job experience. Others have no formal training but have learned their skills through practical experience."[15]**

SOURCE: [15] Correspondence; Manitoba Health Libraries Association; December 19, 1978; July 18, 1980; July 21, 1981.

CATEGORY: **Homemaker**

DEFINITION: "Cares for convalescent, handicapped or other individuals and families requiring home care, by performing any combination of the following duties:

Changes bed linens, washes and irons patients' laundry, and cleans patients' rooms. Purchases, prepares and serves food for patient and other members of family, following special prescribed diets. Assists patient into and out of bed, automobile or wheelchair, to lavatory and up and down stairs. Assists patient to dress, bathe and groom self. Massages patient and applies non-medical preparations and treatments such as alcohol rubs and heat-lamp stimulation. Accompanies ambulatory patients outside home, serving as guide, companion and aide. Entertains patient, reads aloud, and plays cards or other games with patient. Performs a variety of miscellaneous duties as requested, such as obtaining household supplies and running errands." (Revised C.C.D.O. '80, p. 112)

TABLE 61 NUMBER OF HOMEMAKERS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF HOMEMAKERS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978*[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	122	122	158	165	208	211	237	240	242	245	247
Eastman	137	113	108	106	130	135	148	152	156	161	165
Interlake	145	152	143	123	130	145	147	149	151	153	155
Norman	59	54	48	46	58	57	47	48	49	50	52
Parklands	146	135	113	104	133	157	145	145	145	146	146
Thompson							16	17	17	18	18
Westman	312	288	283	301	359	407	398	400	402	404	406
Winnipeg	1032	1085	1008	1019	967	1062	1147	1160	1174	1187	1201
Manitoba	1953	1949	1861	1864	1985	2174	2285	2311	2336	2364	2390

* The data published for 1978 on homemakers were incorrect. These are the correct figures.

Note: All of these homemakers do not work on a full-time basis.

SOURCE: [13]

Family Bureau; June 1976; May 1977;
Children's Aid Society of Winnipeg; June 1976; May 1977;
Victorian Order of Nurses; June 1976;
Care Services; June 1976;
Office of Continuing Care; May 1977; July 1978; September 1979; June 1980; March 1981; November 1982;
Medox; June 1976; May 1977; July 1978; August 1979; October 1980; August 1981; October 1982;
Com Care; June 1976; May 1977;
Upjohn; June 1976; May 1977; July 1978; August 1979; October 1980; August 1981; October 1982;
Department of Community Services and Corrections; June 1977; July 1978; June 1979; October 1980; July 1981; May 1982.

Training

There are no formal training courses for Homemakers in Manitoba at the present time.

Data on supply and training of Homemakers across Canada were not available.

CATEGORY: Medical Laboratory Technologist

DEFINITION: "Performs a variety of medical laboratory tests and procedures, experiments and analyses for the diagnosis, treatment and prevention of disease. Conducts chemical analysis of body fluids; such as blood, urine and cerebro-spinal fluid to ascertain normal and abnormal constituents. Studies blood cells, their numbers, morphological characteristics and coagulation factors related to various physiological and pathological conditions. Studies micro-organisms which cause disease and their effect upon the human body, by means of a wide variety of microscopic and macroscopic techniques. Prepares tissue sections for microscopic examination by a series of techniques such as fixation, embedding, cutting to demonstrate special cellular tissue elements or other characteristics. Performs blood group type and compatibility tests for transfusion purposes. Investigates responses of the body to foreign cells or agents.

Concerned with carrying out technological and technical functions in a medical specialization such as parasitology, or serology to obtain data for use in diagnosis, treatment and control of diseases using knowledge of scientific and mathematical principles and medical laboratory practices." (Revised C.C.D.O. '80, p. 92)

TABLE 62 NUMBER OF MEDICAL LABORATORY TECHNOLOGISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF MEDICAL LABORATORY TECHNOLOGISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	42	47	53	44	34	34	44	44	45	45	46
Eastman	32	34	46	41	41	47	44	45	47	48	49
Interlake	25	39	45	43	43	39	45	46	46	47	48
Norman	24	18	17	23	21	19	19	20	20	20	21
Parklands	30	43	44	36	37	33	21	21	21	21	21
Thompson	26	24	28	24	22	19	17	18	18	19	19
Westman	122	125	138	138	135	132	151	152	152	153	154
Winnipeg	698	694	778	737	717	734	804	813	832	932	842
Manitoba	999	1024	1149	1086	1050	1057	1145	1159	1172	1185	1200

Note: Membership in the Canadian Society of Laboratory Technologists, from whom the above data was obtained, is not mandatory. Hence, the figures are an underestimation of the actual number of medical laboratory technologists in Manitoba.

SOURCE: [13] Correspondence; Canadian Society of Laboratory Technologists; May 7, 1976; March 25, 1977; March 8, 1978; May 25, 1979; July 8, 1980; September 10, 1981; June 3, 1982.

TRAINING - MEDICAL LABORATORY TECHNOLOGY

TABLE 63 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	67	57	72	64	54	55	41
Manitoba	67	57	72	64	54	55	41

SOURCE: [14] Correspondence; Red River Community College; November 1974; August 1976; September 1977; July 1978; August 15, 1979; August 27, 1980; June 23, 1981; May 5, 1982.

TABLE 64 NUMBER OF MEDICAL LABORATORY TECHNOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	999[13]	1024[13]	1149[13]	1088[13]	1050[13]	1057[13]	1145[13]
British Columbia	1932[2]	2100[2]	2056[2]	2318[2]		1953[2]	
Alberta	984[1]	954[1]	971[1]	1597			
Saskatchewan	649[9]	592[9]	582[9]	1008			
Ontario	5700[5]	6100[5]	6150[5]	6300[5]	6450[5]	6600[5]	
Quebec	3116	3250	3141	3172			
New Brunswick	360	401	416	433			
Nova Scotia	752	812	792	827			
Prince Edward Is.	72	77	77	80			
Newfoundland	241	276	284	285			
Yukon & Northwest Territories	42	44	46	47			
Canada	14847	15630	15924	17155			

SOURCE: [13] Correspondence; Canadian Society of Laboratory Technologists; May 7, 1977; March 8, 1978; May 25, 1979; July 8, 1980; September 10, 1981; June 23, 1982.

TRAINING - MEDICAL LABORATORY TECHNOLOGISTS

TABLE 65 NUMBER OF TRAINEES 1976-1982 BY PROVINCE, CANADA

Province	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981	1982
Manitoba	77[14]	76[14]	70[14]	55[14]	55[14]	50[14]	52[14]
British Columbia	103	103	109	110	90		
Alberta	224	277	281	216	193		
Saskatchewan	105	93	96	95	141		
Ontario	655	699	641	668	604		
Quebec	59	200	199	177	91		
New Brunswick	81	79	71	73	82		
Nova Scotia	89	147	79	66	76		
Prince Edward Is.	6	4	4	4	4		
Newfoundland	34	34	37	48	38		
Yukon & Northwest Territories							
Canada	1433	1712	1587	1512	1374		

Note: The following is a list of the various training schools in Manitoba that have received approval to train Medical Laboratory Technologists from the conjoint C.M.A./C.S.L.T, Committee on Approval of Training Program.[15]

SCHOOL	NO. OF TRAINING POSITIONS APPROVED
Health Sciences Centre	20
St. Boniface General Hospital	20
Misericordia General Hospital	8
Deer Lodge Hospital	6
Grace General Hospital	4
Westman Regional Laboratory	12
Total Approved Positions	70

The total approved positions are primarily determined by the demand, or the number of positions expected to be available for Medical Laboratory Technologists in the near future. The Conjoint C.M.A./C.S.L.T. has reduced the number of approved positions recently, as many new graduates have been unable to find employment. Similarly, the Advisory Committee at Red River Community College, where the first part of the training is conducted, has elected to accept only 60 students, meaning that at most 60 of the 70 approved positions will be filled.[15]

SOURCE: [13] Canadian Society of Laboratory Technologists; Annual Reports for 1972; 1973; 1974; 1975; 1976; 1977; 1978; 1979; 1980.

[14] Correspondence; Red River Community College; November 1974; August 1976; September 1977; July 1978; August 1979; July 1980; June 1981; May 1982.

[15] Correspondence; Standards Officer, Urban Health Facilities; Manitoba Health Services Commission; April 1978; August 1979; July 1980; June 1981; May 1982.

TRAINING - MEDICAL LABORATORY TECHNOLOGY

TABLE 66 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	67[13]	57[13]	72[13]	64[13]	54[13]	55[13]	41[13]
British Columbia	70[2]	70[2]	84[2]	82[2]	80*[2]	78[2]	91[2]
Alberta	77[1]	68[1]	71[1]	86[1]	81[1]	76[1]	
Saskatchewan	116[9]	100[9]	105[9]	70			
Ontario	390[5]	380[5]	330[5]	345[5]	354[5]	327[5]	
Quebec	275	230	315	265			
New Brunswick	42	36	37	28			
Nova Scotia	46	50	39	41			
Prince Edward Is.							
Newfoundland	44	35	38	27	26	19	
Yukon & Northwest Territories							
Canada	1163	1026	1091	1008			

* Data revised as per source.

SOURCE: [13] Correspondence; Red River Community College; November 1974; August 1976; September 1977; July 1978; August 1979; August 1980; June 23, 1981; May 5, 1982.

CATEGORY: Mines Inspectors

DEFINITION: A Mine Inspector is a safety inspector engaged in the inspection of underground or open-pit mines to detect unsafe working conditions, and violations of provincial or company mining and safety regulations by performing any combination of the following duties:

Inspect mines to detect defective or incorrectly placed timbers, supports and framework, defective electrical and mechanical equipment, and improper storage of explosives. Examines wall and roof surfaces for evidence of strata faults indicating cave-in or rock slide hazards. Tests air to detect concentrations or toxic gases and explosive dusts, using safety lamp, methane detector, carbon monoxide register and anemometer. Inspects fire-fighting and rescue equipment, and fire hazards regularly. Notifies management of violation or regulations and recommends action to ensure safety of workers. Recommends alteration or installation of ventilation shafts, partitions or equipment to rectify inadequate air-conditioning, instructs mine personnel in safe working practices and promotes safety-mindedness of workers. Investigates explosions, fires and accidents, reports causes and recommends preventive procedures to correct unsafe practices. (Revised C.C.D.O. '80, p. 126)

TABLE 67 NUMBER OF MINES INSPECTORS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF MINES INSPECTORS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[14]	1981[14]	1982[14]	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman	2	2	2	2	1	1	1	1	1	1	1
Parklands	1	1	1	1	1	1	1	1	1	1	1
Thompson	4	4	4	4	3	3	3	3	3	3	3
Westman											
Winnipeg	4	4	4	4	2	2	2	2	2	2	2
Manitoba	11	11	11	11	7	7	7	7	7	7	7

SOURCE: [13] Correspondence; Administrative Assistant; Mineral Resources Division; Department of Mines; Resources and Environmental Management; July 1976; June 1977; February 1978; May 18, 1979.

[14] Correspondence; Director; Chief Inspector; Mining Engineering and Inspections Branch; Department of Energy and Mines; May 8,1 1980; August 20, 1981; May 6, 1982.

Note: Data on the supply and distribution of Mines Inspectors in other provinces were not available.

Training

Statistics on the numbers trained are unavailable, as training for Mines Inspectors in Manitoba is done "on-the-job".

The training consists of one week of orientation, plus a six week period where the trainee is accompanied by the district engineer.

Non-professional personnel are required to have approximately ten years experience in the mining field.

CATEGORY: Registered Nurses

DEFINITION: "Performs any combination of the following functions to give nursing care to patients in hospitals, nursing homes, extended care facilities and the community:

Assesses needs for nursing action. Plans, initials and implements nursing action. Evaluates nursing action in terms of the quality of care.

The practitioner role of the graduate of a diploma program reflects competence for staff nursing positions within the health services and displays high standards of skills in the performance of nursing care.

The role permits freedom of action within the range of delegated responsibilities.

Through experience in nursing, inservice education and other educational programs, the graduate may perfect specialized skills in the performance of direct nursing care, to individuals.

The practitioner role of the graduate of baccalaureate degree programs reflects competence for professional nursing, displays expert skill in the performance of nursing care and/or in the direction and leadership of nursing care team.

The role reflects high level responsibility in all aspects of the generalized nursing services, permits a wide range of decision making based on judgement, requires a minimum of supervision and includes the opportunity to perfect individual talents in such a way that these can be expressed in any facet of the nursing service.

Through experience in nursing and further education, the graduate may progress to more specialized roles within nursing as an expert clinical practitioner within a special field (such as obstetrics, outpatients, pediatrics, psychiatry, community health and nurse practitioner), educator, administrator, consultant, researcher."[13]

---

[13] Canadian Nurses Association; Roles, Functions, and Educational Preparation for the Practice of Nursing; 1970.

TABLE 68 NUMBER OF ACTIVE PRACTISING REGISTERED NURSES 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF ACTIVE PRACTISING REGISTERED NURSES 1983-1986 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[13] 1978	[13] 1979	[13] 1980	[13] 1981	[13] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central	391	417	394	500	503	498	524	528	545	562	578
Eastman	237	240	276	296	280	323	357	322	331	339	348
Interlake	254	255	265	296	305	315	312	319	325	331	338
Norman	370	346	329	357	332	334	174	185	201	215	223
Parklands	244	240	255	280	282	279	287	293	301	310	319
Thompson							166	206	202	215	224
Westman	885	841	852	930	971	967	1002	1038	1068	1099	1127
Winnipeg	4482	4440	4568	4787	4875	4958	5344	5379	5582	5770	5955
Manitoba	6863	6779	6939	7446	7548	7674	8166	8270	8555	8841	9112

SOURCE: [13] Manitoba Association of Registered Nurses Registry; May 12, 1976; October 1977; November 1978; November 1979; January 1981; September 1981; October, 1982.

TABLE 69 NUMBER OF ACTIVE NON-PRACTISING REGISTERED NURSES 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central	44	90	101	67	56	21	15
Eastman	27	45	43	28	29	15	10
Interlake	32	48	47	24	15	12	10
Norman	43	69	71	25	21	13	4
Parklands	30	33	46	15	11	4	5
Thompson							5
Westman	101	142	124	80	70	32	24
Winnipeg	433	635	638	383	343	134	106
Manitoba	710	* 1062	* 1070	622	545	231	179

Note: Projections were not done for the number of Active Non-Practising Registered Nurses.

* The data for 1977 and 1978 include all those nurses registered but who are indicated as being unemployed. The data for the other years refer to nurses registered as active non-practising only.

SOURCE: [13] Manitoba Association of Registered Nurses Registry; July 1976; July 1977; October 1977; November 1978; November 1979; January 1981; September 1981; October 1982.

HOSPITAL BASED SCHOOLS OF NURSING AND COMMUNITY COLLEGE

TABLE 70 NUMBER OF GRADUATES 1976-10982 BY INITIAL DIPLOMA PROGRAMS CANADA

School of Nursing	1976[13]	1977[14]	1978[14]	1979[14]	1980[14]	1981[13]	1982[14]
Brandon General	45	53	49	48	41	40	45
Grace General	72	52	60	55	52	52	55
Health Sciences Centre	118	93	67	65	52	51	67
Misericordia General	83	70	82	52	44	36	58
Red River Community College	67	45	68	72	63	82	63
St. Boniface General	112	92	77	58	54	55	82
Total	497	405	403	350	306	316	370

Number of Graduates 1974-1981 in Manitoba

1974[13]	1975[13]	1976[13]	1977[13,14]
501	541	575	488

1978[14,15]	1979[14,15]	1980[14,15]	1981[14,15]	1982[14,15]
487	380	373	376	430

SOURCE: [13] Registrar, Manitoba Association of Registered Nurses.

[14] Schools of Nursing at: Brandon General Hospital; Grace General Hospital; Health Sciences Centre; Misericordia General Hospital; Red River Community College; St. Boniface General Hospital.

[15] University of Manitoba, School of Nursing.

MANITOBA NURSING EDUCATION PROGRAM

"The School of Nursing, University of Manitoba offers a program leading to the Degree Bachelor of Nursing which prepares candidates for professional nursing in any setting including positions that require leadership skills.

Selections for candidates for admission to the program in nursing is made on the basis of scholarship and professional suitability.

The Degree of Bachelor of Nursing requires four years of study beyond senior matriculation. Registered Nurses and students holding a Bachelor's Degree in another field may complete the requirements for the Bachelor of Nursing Degree in less time."[13]

Registered nurses will now be able to complete the BN program in two calendar years (two academic years and two summers). A "bloc" credit will be given to registered nurses in recognition of their previous training and course work completed for the RN diploma. Students who are registered nurses will continue to be placed in all of the major hospitals in Winnipeg and in community health agencies for hospital practice. However, there will be a reducation in the time required in this part of the program.[14]

"Graduates of the BN program are qualified to continue their studies toward higher degrees for careers in fields such as teaching, administration, research and specialized practice in nursing.

The second level of nursing education in Manitoba is a two year diploma program offered in five hospital based schools of nursing and one Community College:

Brandon General Hospital, Brandon
Grace General Hospital, Winnipeg
Health Sciences Centre, Winnipeg
Misericordia General Hospital, Winnipeg
Red River Community College, Winnipeg
St. Boniface General Hospital, Winnipeg

SOURCE: [13] Manitoba Association of Registered Nurses.

[14] University of Manitoba - BULLETIN - June 10, 1981.

Minimum educational requirements vary for admission to the diploma programs in nursing. Teachers and students should contact the School of Nursing for more specific information.

Emphasis is placed on scientific principles of nursing care, general and specific nursing knowledge, understanding of the health needs of individuals and groups and the consideration of preventive, therapeutic and rehabilitative aspects of nursing."[13]

The following are the qualifications necessary for renewal of registration as an active practising member of the MARN:[15]

Time period immediately preceeding the MARN registration year for which a renewal of registration is sought	Requirements to be fulfilled during this time period to qualify for renewal of registration
3 Years	Practice as a registered nurse for a total of at least 60 working days OR
3 Years	Practice as an RN for a total of at least 50 days AND Successfully complete in the same period, a continuing education or educational course approved by the MARN board OR
2 Years	Successfully complete a refresher program approved by the MARN board (6 week course offered at Red River Community College)

SOURCE: [15] The Registered Nurses Act; July 29, 1980.

TABLE 71 NUMBER OF REGISTERED NURSES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979	1980	1981	1982
Manitoba	7573[13]	7841[13]	8009[13]	8068[13]	8093[13]	7905[13]	8365[13]
British Columbia	19209[2]	17748[2]	18919[2]	20190[2]	21625[2]		
Alberta	11804	12565	13685				
Saskatchewan	7123[9]	7305[9]	7495[9]				
Ontario*	81368[5]	82551[5]	84449	84630[5]			
Quebec	35423	37419	48375				
New Brunswick	5064	5422	5320				
Nova Scotia	6144	6465	6632				
Prince Edward Is.	937	994	1013				
Newfoundland	3172	3448	3537				
Yukon & Northwest Territories	500	520	535				
Canada	180527	182278	197969				

* Number registered and employed in nursing in Ontario

1974	1975	1976	1977	1978	1979	1980	1981
48466	50403	55263	55650	57742	59875	61073	62294

SOURCE: [13] Statistics, Manitoba Association of Registered Nurses.

TRAINING - REGISTERED NURSES

TABLE 72 NUMBER OF GRADUATES OF BACCALAUREATE PROGRAM 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[6]	1978[6]	1979[6]	1980[6]	1981	1982
Manitoba	74[13]	83[13]	84[13]	60[13]	67[13]	60[13]	60[13]
British Columbia	95[2]	108[2]	146[2]	159[2]	168*[2]	155*[2]	190*[2]
Alberta	144[1]	132[1]	174[1]	139[1]	168[1]	162[1]	
Saskatchewan	61[9]	52[7]	58[9]	67	67		
Ontario	358	390[5]	420[5]	365[5]	391[5]	347[5]	
Quebec	153	198	203	208	213		
New Brunswick	105[14]	105[14]	105[14]	105[14]	105[14]	105[14]	
Nova Scotia	57	73	73	73	73		
Prince Edward Is.							
Newfoundland	60	37	37	37	37		
Yukon & Northwest Territories							
Canada	1087	1193	1236	1213	1317		

* Data revised as per source.

SOURCE: [13] Statistics, School of Nursing, University of Manitoba.

[14] G.W.N. Cockburn; Minister of Health, Province of New Brunswick; Report of the Committee on Nursing Manpower 1975; p.22.

TRAINING - REGISTERED NURSES

TABLE 73 NUMBER OF GRADUATES OF INITIAL DIPLOMA PROGRAMS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[6]	1978[6]	1979	1980	1981	1982
Manitoba	501[13]	405[13]	398[13]	320[13]	306[13]	316[13]	370[13]
British Columbia	529[2]	574[2]	591[2]	610[2]	511[2]	578[2]	662[2]
Alberta	723[1]	638[1]	635[1]	553[1]	475[1]	471[1]	
Saskatchewan	349[9]	342[9]	292[9]				
Ontario	3374	3118[5]	2595[5]	2202[5]	2202[5]	2202[5]	
Quebec	2748	2420	2420				
New Brunswick	370[14]	370[14]	370[14]	385[14]	385[14]	[14]	
Nova Scotia	367	362	363				
Prince Edward Is.	51	60	60				
Newfoundland	149	192	163	165	155	114	
Yukon & Northwest Territories							
Canada	9236	8554	8047				

SOURCE: [13] Schools of Nursing at: Brandon General Hospital; Grace General Hospital; Health Sciences Centre; Misericordia General Hospital; Red River Community College; St. Boniface General Hospital.

[14] G.W.N. Cockburn, Minister of Health; Province of New Brunswick; Report of the Committee on Nursing Manpower 1975; p.22

TRAINING - REGISTERED NURSES

TABLE 74 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[6]	1978[6]	1979	1980	1981	1982
Manitoba	575[13]	488[13]	487[13]	380[13]	373[13]	376[13]	430[13]
British Columbia	517[2]	682[2]	737[2]	769[2]	679*[2]	733*[2]	852[2]
Alberta	867[1]	770[1]	809[1]	692[1]	643[1]	633[1]	
Saskatchewan	410[9]	394[9]	350[9]				
Ontario	3732	3508[5]	3015[5]	2567[5]	2593[5]	2549[5]	
Quebec	2901	2618	2623				
New Brunswick	475[14]	475[14]	475[14]	490[14]	490[14]		
Nova Scotia	424	435	436				
Prince Edward Is.	51	60	60				
Newfoundland	284	302	302				
Yukon & Northwest Territories							
Canada	10216	9732	9361				

* Data revised as per source.

SOURCE: [13] Schools of Nursing at: Brandon General Hospital; Grace General Hospital; Health Sciences Centre; Misericordia General Hospital; Red River Community College; St. Boniface General Hospital; University of Manitoba.

[14] G.W.N. Cockburn; Province of New Brunswick; Report of the Committee on Nursing Manpower 1975.

CATEGORY: Nurses' Aides

DEFINITION: Assist with care of patients in hospitals, extended care facilities, nursing homes, clinics and similar establishments:

Answer call-bells to determine patients' needs. Bathe, dress and undress patients. Take and record temperature, pulse and respiration rates. Measure and record patients' fluid intake and output. Distribute and collect food trays. Push wheelchair or stretcher to transport patients to treatment unit. Clean, sterilize and distribute treatment trays, instruments and other supplies. Clean and make beds. Tidy utility, supply and other work areas. Feed patients, if required. Perform duties in psychiatric unit, outpatients and other specialized areas, if required. (Revised C.C.D.O. '80, p. 40)

CATEGORY: Orderlies

DEFINITION: Assist with care of male patients in hospital, extended care facilities, nursing homes and similar establishments:

Bath and shave patients. Measure and record patients' fluid intake and output. Give enemas and shave skin area for surgical procedure. Take and record temperature, pulse and respiration rates. Make beds and clean utility rooms. Lift patient on or off bed and push wheelchair or stretcher to transport patient to treatment area. Distribute and collect food trays. Clean, sterilize and distribute ward equipment. Prepare and accompany body of deceased patient to morgue. Assist physician in application of plaster casts. Feed patients, if required. Perform duties in psychiatric unit, outpatient and other specialized areas, if required. (Revised C.C.D.O. '80, p. 42)

TABLE 75 NUMBER OF NURSES AIDES AND ORDERLIES 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF NURSES AIDES AND ORDERLIES 1983-1986 BY MANITOBA REGION

Region	1976[8]	1977*	1978[8]	1979[13]	1980[13]	1981[13]	1982**[13]	1983	1984	1985	1986
Central	325		335	364	606	643	383	387	391	395	399
Eastman	183		148	204	201	198	146	150	155	159	163
Interlake	146		172	277	189	174	157	159	162	164	166
Norman	103		124	133	111	93	53	54	56	57	58
Parklands	156		113	166	159	131	172	173	173	173	174
Thompson							44	45	47	48	49
Westman	528		531	708	565	535	552	554	557	559	562
Winnipeg	2613		2810	3195	2542	3158	2007	2029	2053	2077	2102
Manitoba	4054		4233	5047	4373	4932	3514	3551	3594	3632	3673

* Data for 1977 are not available.

** Data for 1982 are incomplete.

SOURCE: [13] Unpublished survey results; Department of Health; August 20, 1979; August 26, 1980; August 21, 1981; August 1982.

Training

Training for Nurses Aides and Orderlies is done on an "on-the-job" basis.

CATEGORY: Nursing Assistants (Licensed Practical Nurses)

DEFINITION: "The Licensed Practical Nurse is a person prepared by an approved Practical Nurse educational program to give comprehensive nursing care to selected patients and to assist as a member of the nursing team with the nursing care of other patients. She performs only those acts for which she is prepared and permitted by law. The responsibility for evaluating the nursing needs of the patients, for developing the nursing care plans and for delegating appropriate nursing functions rests with the Registered Professional Nurse. Therefore, in an Institution the Practical Nurse works under the direction of a Registered Nurse; in a private home, under the direction of a Licensed Physician.

Activities include: taking and recording temperature, pulse, respiration and blood pressure; giving baths and shaving patients; serving nutrients; feeding patients; and administering medications and treatments safely."[13]

---

[13] Correspondence; Manitoba Association of Licensed Practical Nurse; April 28, 1975.

TABLE 76 NUMBER* OF NURSING ASSISTANTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF NURSING ASSISTANTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	360	374	385	364	393	361	362	366	370	373	377
Eastman	157	179	194	194	212	174	181	186	191	197	202
Interlake	139	144	176	179	188	176	175	177	180	182	185
Norman	179	205	214	211	231	149	148	151	155	158	162
Parklands	214	214	233	233	248	236	242	242	243	243	244
** Thompson						75	73	75	77	80	82
Westman	391	433	428	461	499	460	455	458	460	462	464
Winnipeg	1536	1624	1689	1732	1891	1766	1687	1705	1725	1745	1766
Manitoba	2976	3173	3319	3374	3662	3397	3323	3360	3401	3440	3482

* Nursing Assistants are known as Licensed Practical Nurses in Manitoba. This number only includes those L.P.N.'s registered as active practicing.

**Previous to 1981, L.P.N.'s practicing in the Thompson region were included in the Norman Region.

SOURCE: [13] Correspondence; Registrar, Manitoba Association of Licensed Practical Nurses; 1976-1982.

TRAINING - NURSING ASSISTANTS

TABLE 77 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION, MANITOBA

Region	[13] 1976	[13] 1977	[14] 1978	[14] 1979	[14] 1980	[13] 1981	[13] 1982
Central							
Eastman							
Interlake							
Norman		7	20	21	22	36	23
Parklands							
Thompson							
Westman	33	36	40	37	56	52	53
Winnipeg	345	271	158	129	118	153	146
Manitoba	378	318	218	187	196	241	222

SOURCE: [13] Registrar; Manitoba Association of Licensed Practical Nurses.

[14] Correspondence; Licensed Practical Nurses Program; Keewatin Community College; School for Practical Nurses; St. Boniface General Hospital; Assiniboine Community College; Red River Community College.

TABLE 78 NUMBER OF NURSING ASSISTANTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	2976[13]	3173[13]	3319[13]	3374[13]	3662[13]	3397[13]	3323[13]
British Columbia	6447	6144[2]	6809	6511[2]	6818[2]	6991[2]	
Alberta	5464[1]	5511[1]	5954[1]				
Saskatchewan	2398[9]	2481[9]	2499				
Ontario	19814*[5]	20130*[5]	21268*[5]	21793*[5]	22127[5]	22570[5]	
Quebec	15395	16508	16908	17521			
New Brunswick	1921[14]	2034[14]	2107[14]				
Nova Scotia	2031	2209	2369	2474			
Prince Edward Is.	500	547	558	526			
Newfoundland	1738	1832	1944	1600			
Yukon & Northwest Territories	*174	*176	188	192			
Canada	*58858	*60745	63923				

* Data revised as per source.

SOURCE: [13] Registrar, Manitoba Association of Licensed Practical Nurses; 1976-1982.

[14] Province of New Brunswick; Report of the Committee on Nursing Manpower 1975; p. 33.

TRAINING - NURSING ASSISTANTS

TABLE 79 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	378[13]	219[13]	218[14]	187[14]	196[14]	241[13]	222[13]
British Columbia	371[2]	441[2]	403[2]	415[2]	325[2]	309[2]	375[2]
Alberta	393[1]	253[1]	209[1]	229[1]	282[1]	222[1]	
Saskatchewan	167[9]	245[9]	196	201			
Ontario	2154[5]	1725[5]	1509[5]	1312[5]	1350[5]	1358[5]	
Quebec	1300	1359	1402	980			
New Brunswick	150	123	71	65			
Nova Scotia	284	254	219	283			
Prince Edward Is.	41	10		34			
Newfoundland	186	188	183	191			
Yukon & Northwest Territories	10	*15	*18	12			
Canada	5434	4832	4428	3909			

* Data revised as per source.

SOURCE: [13] Registrar; Manitoba Association of Licensed Practical Nurses.

[14] Correspondence; Keewatin Community College; St. Boniface General Hospital; Assiniboine Community College; Red River Community College.

CATEGORY: Occupational Therapists

DEFINITION: Plan and carry out treatment programs based on activities such as work, education and recreation to rehabilitate physically and mentally disabled persons:

Administer tests and observe patients to assess their emotional, mental and physical capacities. Plan and direct programs in manual and creative arts, industrial and vocational skills, recreational activities, remedial games, cultural and educational interests and play activities for children. Conduct group programs to assist patients in building self-confidence and in adjusting to family and community. Train handicapped patients in self-care and daily living activities. Advise and instruct patients on specially-adapted household equipment and furnishings. Assess patients' vocational potential and provide work adjustment and actual work experience. Participate in testing and training of patients with perceptual motor problems and provides training for children with learning disabilities. Record patients' activities, response and progress. Attend meetings of rehabilitation team and seminars, workshops and courses on occupational therapy. Supervise and instruct occupational-therapy students and auxiliary personnel assigned to department. (Revised C.C.D.O. '80, p. 47)

TABLE 80 NUMBER OF OCCUPATIONAL THERAPISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF OCCUAPTIONAL THERAPISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	2	3	3	5	4	4	5	5	5	5	5
Eastman	1	1	4	4	2	1	5	5	5	5	5
Interlake	2	2	1	1	1	6					
Norman	2	1	2				1	1	1	1	1
Parklands	1	1	2	1	1	1					
Thompson			1	1							
Westman	8	9	9	8	11	10	11	11	11	11	11
Winnipeg	80	97	100	98	109	111	125	126	128	130	131
Manitoba	96	112	122	118	128	133	147	148	150	152	153

SOURCE: [13] Correspondence; The Association of Occupational Therapists of Manitoba; July 1976; June 1977; April 1978; May 1979; May 1980; June 3, 1981; May 18, 1982.

OCCUPATIONAL THERAPISTS
NUMBER OF GRADUATES 1975-1981 BY PROVINCE, CANADA

	1976	1977	1978	1979	1980	1981	1982
Manitoba Dip.[13]	18	24	23	*	*	*	*
Manitoba B.O.T.	2	6	5	19	20	16	20
British Columbia Degree [2]	34	33	43	36	**8		
Alberta Degree [1]	8	8	11	39	44	50	
Alberta Dip.	20	15	14	17			
Ontario Degree [5]	76	87	87	89	93	99	
Ontario Dip.		***	***	***	14	18	
Quebec Degree [4]	81	95	81	99			
Quebec B.O.T.	****	****	****	****			
Total Degree	199	223	222	280			
Total Dip.	38	39	37		14	18	
.us							
Total B.O.T.	2	6	5	19	20	16	
Grand Total	239	268	264	299			

* 1977-1978 was the last year for the Diploma program in Occuational Therapy. The figures for Manitoba for 1979 and onwards include graduates from the Bachelor of Medical Rehabilitation-Occupational Therapy program as well as the Bachelor of Occupational Therapy program.

** This program admitted its last class in 1980 and will be phased out by 1985.

*** First students graduated in the Spring of 1980.

**** The Diploma program in Quebec was discontinued in 1976.

SOURCE: [13] Correspondence; Division of Physical Therapy, School of Medical Rehabilitation, University of Manitoba; August 4, 1977; July 18, 1978; July 31, 1979; July 1980; June 23, 1981; July 1982.

TABLE 81 NUMBER* OF OCCUPATIONAL THERAPISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	96[13]	112[13]	122[13]	118[13]	128[13]	133[13]	147[13]
British Columbia	200[2]	297[2]	154	338[2]		302[2]	
Alberta	105[1]	126**[1]	143**[1]	237[1]			
Saskatchewan	43[9]	50[9]	51[9]				
Ontario	760[5]	850[5]	940[5]	1020[5]	1110[5]	1204[5]	
Quebec	252	138	255				
New Brunswick	11	10	20				
Nova Scotia	18	32	30				
Prince Edward Is.	6	9	8				
Newfoundland	13	13	21				
Yukon & Northwest Territories							
Canada	1258	1637	1744				

* Data from the Canada Health Manpower Inventory (Source #4) refer only to employed occupational therapists whereas data from provincial sources usually include all of the registered occupational therapists.

** Data revised as per source.

SOURCE: [13] Correspondence; The Association of Occupational Therapists of Manitoba; July 6, 1976; June 13, 1977; April 12, 1978; May 22, 1979; May 1980; June 3, 1981; May 18, 1982.

TRAINING - OCCUPATIONAL THERAPISTS

TABLE 82 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[6]	1979[6]	1980	1981	1982
Manitoba	20[13]	30[13]	28[13]	19[13]	20[13]	16[13]	
British Columbia*	36[2]	33[2]	43[2]	35[2]	39[2]	39[2]	39[2]
Alberta	28[1]	23[1]	25[1]	30[1]			
Saskatchewan							
Ontario	76[5]	87[5]	87[5]	89[5]	107[5]	117[5]	
Quebec	81	95	75	75			
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	239	268	215	213			

* These are graduates of a combined program in Occupational Therapy and Physiotherapy.

SOURCE: [13] Correspondence; Division of Physical Therapy, School of Medical Rehabilitation, University of Manitoba; August 4, 1977; July 18, 1978; July 31, 1979; July 1980.

CATEGORY: Occupational Therapy Assistants

DEFINITION: Assist in carrying out occupational therapy programs to rehabilitate patients in hospitals, extended care facilities and similar establishments:

Instruct patients in weaving, clay modelling, leather work and other arts and crafts. Instruct patients in use of power and hand tools, typewriters and other equipment. Prepare work materials and supplies and assist with equipment maintenance. Report on patients' activities and progress. (Revised C.C.D.O. '80, p. 48)

TABLE 83 NUMBER OF OCCUPATIONAL THERAPY ASSISTANTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF OCCUPATIONAL THERAPY ASSISTANTS 1983-1986 BY MANITOBA REGION

Region	1976[8]	1977*	1978[8]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central			2	2	5	2	2	2	2	2	2
Eastman			1	1	1	1	1	1	1	1	1
Interlake			1								
Norman											
Parklands											
Thompson											
Westman	1		7	18	1	4	8	8	8	8	8
Winnipeg	36		40	20	23	38	41	41	41	42	42
Manitoba	37		51	42	30	45	52	52	52	53	53

* Data not available for 1977. Reports from hospitals and nursing homes on staffing was done on a fifteen month basis rather than the usual twelve month basis.

SOURCE: [13] Unpublished survey results; Department of Health; August 20, 1979; August 26, 1980; August 21, 1981; August 1982.

Training

Training for occupational therapy assistants is done on an "on-the-job" basis, therefore statistical information on the number trained is not available.

Information on the supply, distribution and training of Occupational Therapy Assistants (or an equivalent category) across Canada is not available.

CATEGORY: Operating Room Technician

DEFINITION: The Operating Room Technician is a member of the health team who shares in the skilled technique of the Operating Room. The work demands a high degree of responsibility, emotional stability and attention to minute detail. She/he assists in the care of the patient and helps in the preparation of sterile and unsterile supplies and equipment, performs many skilled tasks assisting the surgeon and surgical team; must be able to work quickly and accuratley in preparing instruments, charts and supplies. Usually works under the supervision of a qualified nurse in hospital areas in which surgical asepsis is practised.[13]

---

[13] President; Manitoba Association of Operating Room Technicians Inc.; April 6, 1981.

TABLE 84 NUMBER OF OPERATING ROOM TECHNICIANS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF OPERATING ROOM TECHNICIANS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977*	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central			2	2	1						
Eastman	2										
Interlake	1		1	1	1	1	1	1	1	1	1
Norman	2				1	1	1	1	1	1	1
Parklands											
Thompson											
Westman	2		7	7	7	6	6	6	6	6	6
Winnipeg	77		56	55	57	52	51	52	52	53	53
Manitoba	84		66	65	67	60	59	60	60	61	61

Note: In 1976 the data were based on information obtained from the membership list of the Manitoba Association of Operating Room Technicians. (That is, the regional breakdown was computed according to the home addresses of the members.) In 1978 and 1979 the number of Operating Room Technicians employed by hospital, by Health and Community Services Region are shown.

* Data were unavailable for 1977.

SOURCE: [13] Manitoba Association of Operating Room Technicians; 1976; 1978; 1979; 1980; 1981; 1982.

TRAINING - OPERATING ROOM TECHNICIANS

TABLE 85 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	16	16	8	18	11	8	6
Manitoba	16	16	8	18	11	8	6

Note: Training in Manitoba consists of a one year program offered at the Health Sciences Centre, Winnipeg. The program consists of three months of theory and nine months of practical experience.

SOURCE: [14] President, Manitoba Association of Operating Room Technicians Incorporated; June 8, 1976; August 15, 1978; May 15, 1980; May 28, 1981; May 5, 1982.

CATEGORY: Optician (Dispensing)

DEFINITION: Fit clients with prescription eyeglasses or contact lenses:

Read prescription to obtain lens specifications. Measure client's eye curvature, pupillary distance and bridge width, using ceratometer and other optical measuring devices. Show current styles of eyeglass frames to client and suggest frames which compliment client's features. Cut and edge lenses and fit lenses into frames. Adjust finished eyeglasses to fit client. Fit contact lenses. Instruct clients in procedure for inserting, removing and cleaning contact lenses. Arrange for grinding and polishing of lenses or grind and polish lenses. Sell sunglasses, magnifying glasses, binoculars and other optical goods. (Revised C.C.D.O. '80, p. 69)

TABLE 86 NUMBER OF OPTICIANS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF OPTHALMIC DISPENSERS 1983-1986 BY MANITOBA REGION

Region	1976	1977[13]	1978[13]	1979*	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands		1	1		1						
Thompson		1	1		1	2	2	2	2	2	2
Westman		7	5		5	6	9	9	9	9	9
Winnipeg		53	71		67	71	74	75	76	77	78
Manitoba	[12] 69	62	78		74	79	85	86	87	88	89

* Data unavailable.

SOURCE: [13] Registrar, Opthalmic Dispensers of Manitoba; 1976; 1977; 1978; 1980; 1981; 1982.

Training

Licensure from the Opthalmic Dispensers of Manitoba is required in order to:

operate one's own optical dispensary
fulfill the requirement that there be at least one licensed optician per optical dispensary

(Non-licensed opticians who have received on-the-job training may work for licensed opticians).

In order to become a licensed optician in Manitoba one must have a Grade Twelve education and subsequently undergo a two-year correspondence and apprenticeship program. Upon completion of the first year of training, a theoretical exam must be written and passed in order to continue into the second year of study. If one is successful at the end of the second year in passing both a theoretical and a practical exam, one is granted licensure by the Opthalmic Dispensers of Manitoba.

In 1982, 23 of 24 who wrote the first year exam and 22 of the 23 who wrote the second year exam, passed. As well, 2 of the 4 who wrote the Composite first and second year exam passed.

A two-year post-graduate course in Contact Lenses is available to licensed opticians. In 1982, one student wrote and passed the first year exam and two students wrote and passed the first and second year composite exam.[14]

SOURCE: [14] Correspondence; Education Chairperson, Opthalmic Dispensers of Manitoba; July 1980; August 11, 1981; August 17, 1982.

TABLE 87 NUMBER OF OPTICIANS (DISPENSING) 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	69[13]	62[13]	78[13]	80[13]	74[13]	79[13]	85[13]
British Columbia	512	512	512	516			
Alberta	192[1]	189[1]	201[1]	213[1]			
Saskatchewan	63	137	110[9]				
Ontario	908[5]	966[5]	1048[5]	1124[5]	1176[5]	1226[5]	
Quebec	307	348	372	392			
New Brunswick	73	74	77	85			
Nova Scotia	85	92	97	96			
Prince Edward Is.	14	14	19	19			
Newfoundland	54	48	55	50			
Yukon & Northwest Territories							
Canada	2346	2442	2569				

SOURCE: [13] Registrar; Opthalmic Dispensers of Manitoba; 1976-1982.

Training

Information on the training of Opticians (Dispensing) in Canada was unavailable, except in the case of Ontario and British Columbia.

	1976	1977	1978	1979	1980	1981	1982
British Columbia[2]	1	1	1	1	1	1	2
Ontario[5]	60	60	71	89	65	65	

CATEGORY: Optometrist

DEFINITION: Examine patients' eyes to determine visual efficiency and prescribe treatment (excluding surgery) to conserve, improve and correct vision:

Locate and measure defects in vision, using ophthalmascopes, biomiscroscopes and other instruments. Refer patients to medical practitioner if signs of ocular disease are detected. Prescribe eyeglasses, contact lenses, eye exercises and other treatments that do not require surgery. Test finished lenses for conformity with prescriptions. Teach patient the use and care of contact lenses. Counsel patients regarding visual hygiene, lighting arrangements, working distances and safety factors. Assist patients with selection of frames and adjust frames to ensure comfortable fit. (Revised C.C.D.O. '80, p. 73)

TABLE 88 NUMBER OF OPTOMETRISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF OPTOMETRISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	6	6	5	5	7	6	6	6	6	6	6
Eastman	2	2	2	1	1	2	1	1	1	1	1
Interlake	2	2	2	1	2	2	2	2	2	2	2
Norman	2	2	2	2	2	2	2	2	2	2	2
Parklands	4	3	4	4	4	4	4	4	4	4	4
Thompson											
Westman	11	11	12	11	12	12	13	13	13	13	13
Winnipeg	37	39	37	36	40	43	45	46	46	47	47
Manitoba	64	65	64	60	68	71	73	74	74	75	75

SOURCE: [13] Correspondence: Manitoba Optometric Society; May 1976; March 1977; May 1978; May 1979; May 1980; June 5, 1981; May 18, 1982.

Training

Training programs for Optometrists are not offered in Manitoba.

TABLE 89 NUMBER OF REGISTERED OPTOMETRISTS 1976-1981 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	64[13]	65[13]	64[13]	60[13]	68[13]	71[13]	73[13]
British Columbia	169[2]	171[2]	175	173[2]		184[2]	
Alberta	168[1]	167[1]	173[1]	173[1]			
Saskatchewan	82[9]	88[9]	92[9]				
Ontario	564[5]	585[5]	609[5]	622[5]	646[5]	670	
Quebec	658	688	717	743			
New Brunswick	47	55	55	57			
Nova Scotia	37	37	38	45			
Prince Edward Is.	6	5	5	6			
Newfoundland	14	16	16	27			
Yukon & Northwest Territories	8	8	9	10			
Canada	1817	1886	1953	1917[13]			

SOURCE: [13] Correspondence; Manitoba Optometric Society; May 1976; March 1977; May 1978; May 28, 1979; May 1980; June 5, 1981; May 18, 1982.

Training Across Canada

There are only two Canadian Schools of Optometry located in:

1. Ontario - University of Waterloo - 5 year program - 7 students from Manitoba enrolled in this program in 1981.
2. Quebec - University of Montreal - 3 year program (given in French).

CATEGORY: Orthopaedic Technologists

DEFINITION: "The Orthopaedic Technologist is a specifically trained allied health individual to assist the orthopaedic surgeon in the practice of medicine. He performs his duties under the direction of the orthopaedic surgeon.

He is an expert in plaster cast application and understands the dangers of this form of treatment. He instructs patients in cast care to include the danger signs. He has the skill to remove plaster cast with care and facility.

The Orthopaedic Technologist is equipped with the general principles of traction techniques. He prepares or sets up specific types of traction requested by the orthopaedic surgeon. He is able to assess patients in traction, detect deficiencies in the apparatus and make simple adjustments.

The Orthopaedic Technologist understands medical and surgical asepsis and prepares for minor surgical procedures. He assembles and prepares the fracture table to the specifications of the orthopaedic surgeon.

The Orthopaedic Technologist is able to fit and ajust canes and crutches. He is able to give patients instruction in the use of these walking aids.

The Orthopaedic Technologist is able to apply simple braces and prosthetics and perform minor adjustments and repairs. He makes simple splints for various conditions under the direction of the orthopaedic surgeon.

The Orthopaedic Technologist is familiar with routine office and departmental procedures and is able to perform certain basic nursing functions.

The Orthopaedic Technologist is an extension of the orthopaedic surgeon and assists him in the care of sick and disabled persons. The Technologist must relate well to other people and be tolerant and considerate of their conditions. He is able to communicate with patients in understanding their anxieties and allaying their fears.

This job description is a composite of the task, which the Orthopaedic Technologist is trained to undertake. There need not, however, be complete agreement among orthopaedic surgeons on the tasks they feel should be delegated. Nor does this description prohibit the orthopaedic surgeon from delegating responsibilities not covered if the technologist has the required skills and ability."[14]

Note: At the present time the role and duties of the technologists are as varied across Canada as there are hospitals. In many hospitals they are still classified as orderlies or attendants.

---

[14] Job Description; Adopted by the members of the Canadian Society of Orthopaedic Technologists; April 28, 1973.

TABLE 90 NUMBER OF ORTHOPAEDIC TECHNOLOGISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF ORTHOPAEDIC TECHNOLOGISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[14]	1981[14]	1982[14]	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	6	7	9	9	12	11	11	11	11	11	11
Manitoba	6	7	9	9	12	11	11	11	11	11	11

SOURCE: [13] Correspondence; Co-ordinator of Provincial Directors; Regional Branch of Manitoba, The Canadian Society of Orthopaedic Technologists; June 1976; June 1977; February 1978; June 15, 1979.

[14] Correspondence; Registrar, The Canadian Society of Orthopaedic Technologists; August 12, 1980; May 31, 1982.

Training

Training programs for Orthopaedic Technologists are not offered in Manitoba.

TABLE 91 NUMBER OF ACTIVE MEMBERS OF THE CANADIAN SOCIETY OF ORTHOPAEDIC TECHNOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[13]	1977[13]	1978[13]	1979[13]	1980[14]	1981[14]	1982[14]
Manitoba	7	7	9	9	12	11	11
British Columbia	8	8	11	15	13	9	12
Alberta	5	5	15	14	18	29	35
Saskatchewan	3	3	2	2	5	4	4
Ontario	49	49	41	64	75	72	88
Quebec	44	44	54	70	73	65	68
New Brunswick	1	1	3	4	7	5	5
Nova Scotia	1	1	1	6	6	5	7
Prince Edward Is.				1			
Newfoundland	1	1	1	3	3	3	3
Yukon & Northwest Territories							
Canada	119	119	137	188	212	203	233

Training

"The training programme for orthopaedic technologists has been approved for George Brown College in Toronto. This will be a part time programme...Upon completion of the College portion an 18 month internship is required."[14]

SOURCE: [13] Correspondence; Coordinator of Provincial Directors, Regional Branch of Manitoba, The Canadian Society of Orthopaedic Technologists; June 1976; June 1977; February 1978; June 15, 1979.

[14] Correspondence; Registrar, The Canadian Society of Orthopaedic Technologists; August 12, 1980; May 1982.

CATEGORY: Osteopath

DEFINITION: Diagnose disorders of human body and treat them with emphasis on manipulative therapy:

Examine, question and observe patient to diagnose disorder. Perform or order blood analysis, in diagnosis. Treat disorders of musculo-skeletal, circulatory and nervous systems, using manipulative therapy and medical procedures. Prescribe medication and perform minor surgery where permitted by provincial legislation. (Revised C.C.D.O. '801, p. 29)

TABLE 92 NUMBER OF REGISTERED OSTEOPATHS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Manitoba*	1	1	1	1	1		
British Columbia	10	10	7	9	9	9	8
Alberta	2	2	2	2	2	2	2
Saskatchewan	2	1	1	1	1	1	1
Ontario	44	45	40	40	39	37	38
Quebec	6	6	5	6	5	3	2
New Brunswick	2	2	2	2	2	2	2
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	67	67	58	61	59	54	53

* The one osteopath in Manitoba between 1976-1980 was non-active.

SOURCE: [13] Correspondence; Administrative Secretary, Canadian Osteopathic Association; June 1976; June 1977; August 1978; May 16, 1979; May 12, 1980; August 19, 1981.

Training

In Canada, the only province offering unrestricted licensure is Quebec. Where the requirements are the "same as those required for Doctors of Medicine", under the Professional Corporation of Physicians of Quebec. In Nova Scotia, an osteopath must hold a M.D. to be licensed. Most other provinces provide for restricted licensure of osteopaths, usually excluding surgery and obstetrics. Some provinces (Alberta, P.E.I., and Newfoundland) make no provision for the licensing of osteopaths.

The accreditation guidelines for schools of osteopathy are detailed, quite specific and resemble in many ways those of the LCME for medical schools.

Perhaps because of our licensure requirements, there are relatively few osteopaths practising in Canada - probably between fifty and sixty. Half of these are in Ontario, and ten to a dozen in British Columbia. There are four in Quebec, one in the Maritimes, and two or three in each of the other provinces. In addition, there are about a half-dozen Canadian provinces currently enrolled in U.S. schools of osteopaths.[14]

SOURCE: [14] The Association of Canadian Medical Colleges; Forum; V. XII; No. 2; February-March, 1979; page 3.

CATEGORY: Pharmacists

DEFINITION: Pharmacists, Hospital

Compound and dispense drugs and medicines in a hospital:

Review prescriptions to ensure proper doses have been prescribed and that toxic compounds will not be formed. Fill prescriptions and prepare pharmaceuticals, using various physical and chemical procedures. Prepare and sterilize medications for injections. Bottle, label and package prepared compounds. Forward prescriptions and other preparations to various hospital departments. Maintain inventory of all pharmaceuticals issued and returned. Maintain control records of narcotics, poisons, habit-forming drugs and prescription files. Advise medical staff on drug incompatability, contra-indications and other relevant information. Maintain stock of supplies.

Pharmacists, Retail

Compound and dispense prescribed pharmaceuticals and related preparations:

Prepare or supervise preparation of liquid medicines, ointments, powders, pills and other medications. Check prescriptions for overdoses and drug interactions. Weigh, measure and mix drugs and other medicinal compounds and fill bottles and capsules with correct quantity and composition of preparation. Store and preserve biologicals, vaccines, serums and other drugs to prevent deterioration. Dispense medical and surgical products for internal and external use as prescribed. Maintain patient medication profiles and record prescriptions dispensed and poisons and narcotics issued. Order and maintain stock of pharmaceutical supplies. Provide information on uses and effects of medicaments. Sell non-prescription drugs, sick-room supplies, toiletries, cosmetics, lotions and other commercial products. (Revised C.C.D.O. '80, pp. 30-31)

TABLE 93 NUMBER OF PHARMACISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PHARMACISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983[3]	1984[3]	1985[3]	1986[3]
Central	40	41	43	45	42	42	41	47	50	53	56
Eastman	24	23	25	26	30	28	28	29	30	31	31
Interlake	23	21	28	29	30	28	26	34	37	40	43
Norman	26	25	28	28	26	30	19	20	22	24	27
Parklands	29	29	30	24	29	28	35	27	27	27	27
Thompson							15	20	22	25	28
Westman	82	79	82	91	90	87	91	96	101	105	110
Winnipeg	477	491	504	470	544	554	568	586	606	629	647
Manitoba	701	709	740	713	791	797	823	859	895	934	969

SOURCE: [13] Correspondence; Manitoba Pharmaceutical Association, April 1975; May 1976; March 1977; April 1978; May 1979; July 1980; July 1981; July 29, 1982.

TRAINING - PHARMACISTS

TABLE 94 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION, MANITOBA AND PROJECTED* NUMBER OF GRADUATES 1983-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	49	44	46	33	51	42	43	44			
Manitoba	49	44	46	33	51	42	43	44			

* These projections are based on the number of students enrolled in 4th year at the present time. These will be the maximum number of graduates from the Faculty of Pharmacy, at the University of Manitoba.

SOURCE: [14] Correspondence; Faculty of Pharmacy; University of Manitoba; July 27, 1982.

TABLE 95 NUMBER OF PHARMACISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	701[13]	709[13]	740[13]	713[13]	791[13]	797[13]	823[13]
British Columbia	1788[2]	1825[2]	1865[2]	1887[2]	1954[2]	1918[2]	
Alberta	1332[1]	1406[1]	1486[1]	1573[1]			
Saskatchewan	784[9]	1326[9]					
Ontario	5103[5]	5083[5]	5138[5]	5294[5]	5417[5]	5537[5]	
Quebec	2662	2891	3068	3197			
New Brunswick	293	293	310	317			
Nova Scotia	492	502	520	533			
Prince Edward Is.	46	50	60	58			
Newfoundland	224	255	276	287			
Yukon & Northwest Territories	29	27	33	30			
Canada	13454	14525					

SOURCE: [13] Correspondence; Manitoba Pharmaceutical Association; April 1975; May 1976; March 1977; April 1978; May 1979; July 1980; July 1981; July 29, 1982.

TRAINING - PHARMACISTS

TABLE 96 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	40[13]	44[13]	46[13]	33[13]	51[13]	42[13]	43[13]
British Columbia	80[2]	80[2]	87[2]	87[2]	125*[2]	120*[2]	130*[2]
Alberta	81[1]	88[1]	94[1]	94[1]	73[1]	99[1]	
Saskatchewan	63[9]	58[9]					
Ontario	143	142	135	157			
Quebec	156	196	176	197			
New Brunswick							
Nova Scotia	49	56	61	54			
Prince Edward Is.							
Newfoundland	24	24	25	24			
Yukon & Northwest Territories							
Canada	629	690					

* Data revised as per source.

SOURCE: [13] Correspondence; Faculty of Pharmacy; University of Manitoba.

CATEGORY: Physicians

DEFINITION: Includes occupations concerned with preventing, diagnosing and treating human illnesses. Activities include: conducting medical examinations, making diagnosis, prescribing and giving treatment for diseases, disorders and injuries of the human body and applying preventive medicine techniques; performing surgical operations in the treatment of injuries; diseases and disorders of the human body; and engaging in clinical research within the field of his/her activities and scope of his/her competence. (Revised C.C.D.O. '80, p. 2)

Note: Manitoba Physician Data

In addition to the data from the College of Physician and Surgeons of Manitoba, we are presenting functional data on Physician Practice Profiles from the Manitoba Health Services Commission.

We are including only those projections for Manitoba that are based on the functional data. The projections for all of the specialties except ophthalmology, otolaryngology and urology, are done on a regional (i.e. Manitoba Health and Community Services) basis. The projections for ophthalmology, otolaryngology and urology are done on a Metro, Non-Metro basis.

Due to time and budget constraints it was not possible to do projections based on 1980 data from the Manitoba Health Services Commission for all physician categores. Projections based on 1980 M.H.S.C. data were done only for: General Practitioners and Specialists.

Projections based on 1979 M.H.S.C. data were used for: Internal Medicine; Paediatrics; Psychiatry; Anaesthesia; General Surgery; and Obstetrics and Gynaecology.

Projections based on 1976 Manitoba Health Services Commission data were used for the other specialties that are included in the physician section of this report.

In regard to the tables displaying physician data across Canada. We use the College of Physicians and Surgeons of Manitoba data for the years 1976-1982.

TABLE 97 NUMBER OF PHYSICIANS BY CLASSIFICATION BY REGION ACCORDING TO THE REGISTRY OF THE COLLEGE OF PHYSICIANS AND SURGEONS AS OF AUGUST 1ST, 1982 IN MANITOBA

CLASSIFICATION	Central	Eastman	Inter-Lake	Nor-Man	Park-Lands	Thompson	West-Man	Wpg.	Total
Anaesthesia							3	58	61
Cardio & Thor. Surgery								11	11
Dermatology								10	10
Gen. Practice	58	43	45	35	34	40	109	657	1021
Gen. Surgery	4	1	3		2		10	59	79
Int. Medicine							8	152	160
Neurology							1	11	12
Neurosurgery								5	5
Ob. & Gyn.			1				6	58	65
Ophthalmology							3	28	31
Ortho. Surgery							2	40	42
Otolaryngology							1	21	22
Paediatrics			1			1	2	82	86
Pathology							4	33	37
Phys. Med. & Rehab.								5	5
Plastic Surg.								8	8
Psychiatry	2	1	7				3	70	83
Public Health								3	3
Radiology	1		1		1		5	49	57
Urology							2	23	25
Total	65	45	58	35	37	41	159	1383	1823

TABLE 98 NUMBER OF PHYSICIANS BY FUNCTIONAL SPECIALTY BY REGION AS OF MARCH 31, 1982 ACCORDING TO PHYSICIAN PRACTICE PROFILES FROM THE MANITOBA HEALTH SERVICES COMMISSION

CLASSIFICATION	Central	Eastman	Inter-Lake	Nor-Man	Park-Lands	Westman	Wpg.	Total
Academic							8	8
Administration						2	12	14
Allergy & Clinical Immunology						1	5	6
Anaesthesia	1	2				5	66	74
Cardio. & Thoracic Surgery							17	17
Dermatology							10	10
General Practice	53	41	38	47	23	94	453	749
General Surgery	2	1	2	3	1	8	59	76
Int. Med. (Gen.)						7	86	93
Cardiology						1	26	27
Endocrinology							3	3
Gastroenterology							4	4
Geriatrics							3	3
Haematology							9	9
Infectious Diseases							5	5
Nephrology							6	6
Respirology					1		13	14
Rheumatology							4	4
Neurosurgery							7	7
Neurology							7	7
Nuclear Medicine							6	6
Obstetrics & Gyn.		1		2		7	58	68

CLASSIFICATION	Cent-ral	East-man	Inter-Lake	Nor-Man	Park-Lands	West-man	Wpg.	Total
Opthalmology					1	3	36	40
Orthopaedic Surgery						1	32	33
Otolaryngology							17	17
Paediatrics	1		2			3	73	79
General Pathology						3	8	11
Med. Biochemistry							12	12
Med. Microbiology						2	15	17
Phys. Med. & Rehab.							5	5
Plastic Surgery							6	6
Psychiatry	2	1	5			8	81	97
Public Health			1	2		1	7	11
Radiology	1		1			3	39	44
Urology						2	17	19
TOTAL	60	46	49	54	26	151	1215	1601

TABLE 99 NUMBER OF REGISTERED GENERAL PRACTITIONERS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA[13]

Region	1976	1977	1978	1979	1980	1981	* 1982
Central	54	51	53	50	50	53	58
Eastman	38	30	40	36	37	41	43
Interlake	37	42	45	40	38	43	45
Norman	62	68	60	64	64	66	35
Parklands	33	35	41	34	32	32	34
Thompson							40
Westman	111	110	107	104	100	109	109
Winnipeg	502	570	572	559	584	648	657
Manitoba	837	915	918	887	905	992	1021

* These data include certified family practitioners.

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

TABLE 100 NUMBER OF FUNCTIONAL GENERAL PRACTITIONERS 1976-1981 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF FUNCTIONAL GENERAL PRACTITIONERS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central	56	56	54	54	60	53	66	67	69	72	74
Eastman	31	37	39	42	30	41	51	56	67	63	67
Interlake	39	38	36	38	37	38	32	30	28	26	25
Norman*	49	55	46	58	61	47	63	63	61	62	64
Parklands	36	34	33	37	30	23	23	20	19	18	18
Thompson*											
Westman	90	94	97	98	101	94	82	76	73	68	64
Winnipeg	410	438	440	459	478	453	530	542	552	558	566
Manitoba	711	752	745	786	805	749	847	854	869	867	878

* Data on number of functional practitioners in Thompson region are included in the data for Norman Region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles; 1976-1981.

TABLE 101 NUMBER OF REGISTERED SPECIALISTS, 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central	8	7	6	6	7	6	7
Eastman			1	1	1	1	1
Interlake	9	11	11	12	13	12	13
Norman	1	2	2	1	1	2	
Parklands	3	3	4	4	4	3	3
Thompson							1
Westman	49	48	50	49	52	51	48
Winnipeg	622	630	644	652	665	682	729
Manitoba	692	701	718	725	742	757	802

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976 - 1982.

TABLE 102 NUMBER OF FUNCTIONAL SPECIALISTS 1976-1981 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF FUNCTIONAL SPECIALISTS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central	10	8	9	9	9	7	15	17	19	20	22
Eastman	2	4	5	4	3	5	1	2	1		1
Interlake	17	14	12	14	15	11	15	16	15	14	13
Norman*	15	14	14	11	12	7	14	15	14	14	16
Parklands	5	4	5	5	5	3	6	6	6	5	5
Thompson*										48	46
Westman	61	64	65	66	61	57	55	53	51		
Winnipeg	757	784	774	754	840	762	824	811	797	780	776
Manitoba	867	892	884	863	945	852	930	920	903	881	880

* Data on number of functional practitioners in Thompson region are included in the data for Norman Region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles; 1976-1981.

PHYSICIANS: SPECIALTY - ANAESTHESIA

TABLE 103 NUMBER OF REGISTERED ANAESTHETISTS 1976-1982 BY MANITOBA REGION, MANITOBA[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman	3	3	3	3	3	3	3
Winnipeg	46	45	49	48	47	51	58
Manitoba	49	48	52	51	50	54	61

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

PHYSICIANS: SPECIALTY - ANAESTHESIA

TABLE 104 NUMBER OF FUNCTIONAL ANAESTHETISTS 1976-1981 BY MANITOBA REGION, MANITOBA AND PROJECTED NUMBER OF ANAESTHETISTS 1982-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[3]	1983[3]	1984[3]	1985[3]	1986[3]
Central	2	1	1	1	1	1	1	1	1	1	1
Eastman	2	3	3	2	2	2	2	2	2	2	2
Interlake											
Norman*	2	2	1								
Parklands											
Thompson*											
Westman	5	5	5	5	5	5	6	8	8	8	8
Winnipeg	71	67	66	68	66	66	74	75	75	76	76
Manitoba	82	78	76	76	74	74	83	86	86	87	87

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles, 1976-1981.

PHYSICIANS: SPECIALTY - CARDIOVASCULAR AND THORACIC SURGERY

TABLE 105 NUMBER OF REGISTERED CARDIOVASCULAR AND THORACIC SURGEONS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	979	1980	981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	7	5	8	9	10	11	11
Manitoba	7	5	8	9	10	11	11

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982

PHYSICIANS: SPECIALTY - CARDIOVASCULAR AND THORACIC SURGERY

TABLE 106 NUMBER OF FUNCTIONAL CARDIOVASCULAR AND THORACIC SURGEONS 1976-1981 BY MANITOBA HEALTH REGION, AND PROJECTED NUMBER OF CARDIOVASCULAR AND THORACIC SURGEONS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central											
Eastman											
Interlake											
Norman*											
Parklands											
Thompson*											
Westman											
Winnipeg	11	12	13	14	15	17	17	17	17	18	18
Manitoba	11	12	13	14	15	17	17	17	17	18	18

* Data for number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Profiles; 1976-1981.

PHYSICIANS: SPECIALTY - DERMATOLOGY

TABLE 107 NUMBER OF REGISTERED DERMATOLOGISTS 1976-1982 BY MANITOBA REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	5	7	8	9	9	11	10
Manitoba	5	7	8	9	9	11	10

SOURCE: [13] College of Physicians and Surgeons of Manitoba, 1976-1982.

PHYSICIANS: SPECIALTY - DERMATOLOGY

TABLE 108 NUMBER OF FUNCTIONAL DERMATOLOGISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF DERMATOLOGISTS 1982-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman*											
Parklands											
Thompson*											
Westman											
Winnipeg	8	8	9	9	9	10	10	10	10	10	11
Manitoba	8	8	9	9	9	10	10	10	10	10	11

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - GENERAL SURGERY

TABLE 109 NUMBER OF REGISTERED GENERAL SURGEONS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central	4	3	3	4	4	2	4
Eastman			1	1	1	1	1
Interlake	2	3	3	3	3	3	3
Norman	1	1	1	1	1	1	
Parklands	2	2	3	3	3	2	2
Thompson							
Westman	11	10	11	11	10	10	10
Winnipeg	70	76	73	70	66	65	59
Manitoba	90	95	95	93	88	84	79

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982

PHYSICIANS: SPECIALTY - GENERAL SURGERY

TABLE 110 NUMBER OF FUNCTIONAL GENERAL SURGEONS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF GENERAL SURGEONS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central	4	4	5	4	4	2	4	4	4	3	3
Eastman		1	1	1	1	1	3	3	2	2	2
Interlake	3	3	3	3	4	2	4	3	3	3	3
Norman*	5	4	4	1	3	3	3	3	3	4	4
Parklands	3	2	3	3	2	1	3	2	2	2	2
Thompson*											
Westman	10	13	12	10	9	8	9	9	9	9	9
Winnipeg	66	65	72	66	68	59	73	77	75	73	78
Manitoba	91	92	100	88	91	76	99	101	98	96	101

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - INTERNAL MEDICINE

TABLE 111 NUMBER OF REGISTERED INTERNISTS 1976-1981 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central				1	1		
Eastman							
Interlake							
Norman						1	
Parklands							
Thompson							
Westman	9	8	8	7	8	9	8
Winnipeg	112	129	134	137	141	140	152
Manitoba	121	137	142	145	150	150	160

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - INTERNAL MEDICINE

TABLE 112 NUMBER OF FUNCTIONAL INTERNISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF INTERNISTS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central				1	1	1	2	2	2	3	3
Eastman								1	1	2	2
Interlake							3	3	4	6	7
Norman*					2		2	2	3	3	4
Parklands				1	1		2	2	1	2	2
Thompson*											
Westman	10	8	7	7	10	8	8	8	8	8	8
Winnipeg	156	151	149	151	152	159	169	169	168	179	183
Manitoba	166	159	156	160	166	168	186	187	187	203	209

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - NEUROLOGY

TABLE 113 NUMBER OF REGISTERED NEUROLOGISTS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman			1	1	1	1	1
Winnipeg	8	8	9	9	10	10	12
Manitoba	8	8	10	10	11	11	11

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - NEUROLOGY

TABLE 114 NUMBER OF FUNCTIONAL NEUROLOGISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF NEUROLOGISTS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	1981	1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman*											
Parklands											
Thompson*											
Westman											
Winnipeg	7	8	8	7	7	7	8	8	9	9	9
Manitoba	7	8	8	7	7	7	8	8	9	9	9

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - NEUROSURGERY

TABLE 115 NUMBER OF REGISTERED NEUROSURGEONS 1976-1982 BY MANITOBA REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	4	4	5	4	4	4	5
Manitoba	4	4	5	4	4	4	5

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

PHYSICIANS: SPECIALTY - NEUROSURGERY

TABLE 116 NUMBER OF FUNCTIONAL NEUROSURGEONS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF NEUROSURGEONS 1982-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman*											
Parklands											
Thompson*											
Westman											
Winnipeg	5	6	6	5	5	7	7	7	7	7	8
Manitoba	5	6	6	5	5	7	7	7	7	7	8

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - OBSTETRICS AND GYNAECOLOGY

TABLE 117 NUMBER OF REGISTERED OBSTETRICIANS AND GYNAECOLOGISTS 1976-1982 BY MANITOBA REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake	1	1	1	1	1	1	1
Norman							
Parklands							
Thompson							
Westman	6	6	6	6	6	6	6
Winnipeg	51	47	51	52	52	55	58
Manitoba	58	54	58	59	59	62	65

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - OBSTETRICS AND GYNAECOLOGY

TABLE 118 NUMBER OF FUNCTIONAL OBSTETRICIANS AND GYNAECOLOGISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF OBSTETRICIANS AND GYNAECOLOGISTS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central											
Eastman						1					
Interlake	2	1	1	1	1		1	1	1	1	1
Norman*	2	2	4	3	2	2	2	2	2	3	3
Parklands											
Thompson*											
Westman	7	7	7	7	7	7	6	6	6	6	6
Winnipeg	58	63	62	64	58	58	63	65	65	64	64
Manitoba	69	73	74	75	68	68	72	74	74	74	74

* Data on number of functional practitioners in Thompson region are included in the data for Normal region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - OPHTHALMOLOGY

TABLE 119 NUMBER OF REGISTERED OPHTHALMOLOGISTS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman	3	3	3	3	3	2	3
Winnipeg	28	28	26	24	23	24	28
Manitoba	31	31	29	27	26	26	31

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - OPHTHALMOLOGY

TABLE 120 NUMBER OF FUNCTIONAL OPHTHALMOLOGISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF OPHTHALMOLOGISTS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central											
Eastman											
Interlake											
Norman*	2	2	1	1	1		7	6	6	6	6
Parklands	1	1	1	1	1	1					
Thompson*											
Westman	5	5	5	4	3	3					
Winnipeg	34	38	37	38	37	36	27	26	26	26	25
Manitoba	42	46	44	44	42	40	34	32	32	32	31

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - ORTHOPAEDIC SURGERY

TABLE 121 NUMBER OF REGISTERED ORTHOPAEDIC SURGEONS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman	1	1	1	1	2	2	2
Winnipeg	31	31	28	30	30	32	40
Manitoba	32	32	29	31	32	34	42

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - ORTHOPAEDIC SURGERY

TABLE 122 NUMBER OF FUNCTIONAL ORTHOPAEDIC SURGEONS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF ORTHOPAEDIC SURGEONS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central											
Eastman											
Interlake											
Norman*											
Parklands											
Thompson*											
Westman	3	3	3	3	3	1	5	6	6	6	7
Winnipeg	34	35	32	32	30	32	37	37	38	37	41
Manitoba	37	38	35	35	33	33	42	44	43	43	48

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - OTOLARYNGOLOGY

TABLE 123 NUMBER OF REGISTERED OTOLARYNGOLOGISTS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman						1	1
Winnipeg	19	17	19	19	19	22	21
Manitoba	19	17	19	19	19	23	22

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - OTOLARYNGOLOGISTS

TABLE 124 NUMBER OF FUNCTIONAL OTOLARYNGOLOGISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF OTOLARYNGOLOGISTS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central											
Eastman											
Interlake											
Norman*	1	1	1	1	1		4	4	4	4	5
Parklands											
Thompson*											
Westman		1	1	1	1						
Winnipeg	24	17	17	18	18	17	29	27	28	28	28
Manitoba	25	19	19	20	20	17	33	31	32	32	33

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - PAEDIATRICS

TABLE 125 NUMBER OF REGISTERED PAEDIATRICIANS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central						1	
Eastman							
Interlake	1	1	1	1	1	1	1
Norman							
Parklands							
Thompson							1
Westman	2	2	3	2	3	5	2
Winnipeg	65	65	69	64	73	75	82
Manitoba	68	68	73	67	77	82	86

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - PAEDIATRICS

TABLE 126 NUMBER OF FUNCTIONAL PAEDIATRICIANS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF PAEDIATRICIANS 1982-1986 BY MANITOBA REGION

	[14]	[14]	[14]	[14]	[14]	[14]	[3]	[3]	[3]	[3]	[3]
Region	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Central						1					
Eastman											
Interlake	1	1	1	1	1	2	1	1	2	2	2
Norman*											
Parklands											
Thompson*											
Westman	2	2	2	3	3	3	2	2	2	1	1
Winnipeg	71	74	71	75	80	73	71	69	67	68	67
Manitoba	74	77	74	79	84	79	74	72	71	71	70

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - PATHOLOGY

TABLE 127 NUMBER OF REGISTERED PATHOLOGISTS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman	2	5	4	4	4	4	4
Winnipeg	26	29	29	28	30	33	33
Manitoba	28	34	33	32	34	37	37

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - PATHOLOGY

TABLE 128 NUMBER OF FUNCTIONAL PATHOLOGISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF PATHOLOGISTS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central				1	1						
Eastman											
Interlake											
Norman*											
Parklands											
Thompson*											
Westman	3	4	5	5	4	5	10	10	10	10	10
Winnipeg	42	45	39	40	39	35	52	53	54	54	56
Manitoba	45	49	44	46	44	40	62	63	64	64	66

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - PHYSICIAL MEDICINE AND REHABILITATION

TABLE 129 NUMBER OF REGISTERED PHYSIATRISTS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	3	2	2	3	5	4	5
Manitoba	3	2	2	3	5	4	5

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - PHYSICAL MEDICINE AND REHABILITATION

TABLE 130 NUMBER OF FUNCTIONAL PHYSIATRISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF PHYSIATRISTS 1982-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman*											
Parklands											
Thompson*											
Westman											
Winnipeg	6	5	3	3	4	5	5	5	5	5	5
Manitoba	6	5	3	3	4	5	5	5	5	5	5

* Data for number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - RADIOLOGY

TABLE 135 NUMBER OF REGISTERED RADIOLOGISTS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central	1	1					1
Eastman							
Interlake	1	1		1	1	1	1
Norman							
Parklands	1	1		1	1	1	1
Thompson							
Westman	3	3		3	3	2	5
Winnipeg	42	45	48	41	43	47	49
Manitoba	48	51	48	46	48	51	57

SOURCE: [13] College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - RADIOLOGY

TABLE 136 NUMBER OF FUNCTIONAL RADIOLOGISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF RADIOLOGISTS 1982-1986 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[3] 1982	[3] 1983	[3] 1984	[3] 1985	[3] 1986
Central	2	1	1	2	1	1	2	2	2	2	3
Eastman											
Interlake	1	1	1	1	1	1	1				
Norman*											
Parklands	2	1	1	1	1			2	2	2	1
Thompson*											
Westman	1	1	1	1	3	3	3				
Winnipeg	44	44	40	42	38	39	42	41	43	43	37
Manitoba	50	48	44	47	44	44	48	45	47	47	41

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

PHYSICIANS: SPECIALTY - UROLOGY

TABLE 137 NUMBER OF REGISTERED UROLOGISTS 1976-1982 BY MANITOBA HEALTH REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman	2	2	2	2	2	2	2
Winnipeg	18	20	17	17	17	20	23
Manitoba	20	22	19	19	19	22	25

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

PHYSICIANS: SPECIALTY - UROLOGY

TABLE 138 NUMBER OF FUNCTIONAL UROLOGISTS 1976-1981 BY MANITOBA HEALTH REGION AND PROJECTED NUMBER OF UROLOGISTS 1982-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[3]	1983[3]	1984[3]	1985[3]	1986[3]
Central											
Eastman											
Interlake											
Norman*							6	6	6	6	6
Parklands											
Thompson*											
Westman	3	2	2	2	2	2					
Winnipeg	21	22	22	18	20	17	29	30	29	29	29
Manitoba	24	24	24	20	22	19	35	36	35	35	35

* Data on number of functional practitioners in Thompson region are included in the data for Norman region.

SOURCE: [14] Manitoba Health Services Commission; Physician Practice Profiles 1976-1981.

TRAINING - PHYSICIANS

TABLE 139 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF GRADUATES 1982-1986 BY MANITOBA REGION[13]

Region	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	94	98	96	91	96	97	86	90	90	90	90
Manitoba	94	98	96	91	96	97	86	90	90	90	90

ENROLLMENT - MANITOBA MEDICAL STUDENTS[12]

Total number of students in Basic Training Program

Year	Number
1973-74	349
1974-75	377
1975-76	401
1976-77	394
1977-78	385
1978-79	382
1979-80	370
1980-81	386
1981-82	388

SOURCE: [13] Statistics, Faculty of Medicine, University of Manitoba.

TABLE 140 NUMBER OF INTERNS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF INTERNS 1983-1986 BY MANITOBA REGION[13]

Region	1976	1977	1978	1979	1980*	1981*	1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	94	109	93	110	100	100	121	100	100	100	100
Manitoba	94	109	93	110	100	100	121	100	100	100	100

*Seven of these are extended interns.

SOURCE: [13] Manitoba affiliated Teaching Hospitals.

TABLE 141 NUMBER OF RESIDENTS 1976-1981 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF RESIDENTS 1982-1986 BY MANITOBA REGION[14]

Region	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	193	219	228	226	223	229	220	220	220	220	220
Manitoba	193	219	228	226	223	229	220	220	220	220	220

SOURCE: [14] Manitoba affiliated Teaching Hospitals

TABLE 142 NUMBER OF REGISTERED PHYSICIANS 1976-1982 BY PROVINCE, CANADA PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[15]	1979[15]	1980[15]	1981[15]	1982
Manitoba	1529[13]	1616[13]	1636[13]	1612[13]	1647[13]	1749[13]	1823[13]
British Columbia	4669[2]	4873[2]	5048[2]	5244*[2]	5246	5690*[2]	
Alberta	2911	3014	3194	3311	3423	3535	
Saskatchewan	1248[9]	1342[9]	1613	1671	1728	1785	
Ontario	14643[5]	14927[5]	15078[5]	15301[5]	15526[5]	15747[5]	
Quebec	11262	11545	12529	12986	13428	13865	
New Brunswick	707[1]	781	853	884	914	944	
Nova Scotia	1404	1478	1471	1525	1577	1628	
Prince Edward Is.	140	141	137	142	147	155	
Newfoundland	779	803	632	655	677	699	
Yukon & Northwest Territories	56	59	53	54	57	58	
Canada	39348	40579	42244	43215	44370	45582	

* Data revised as per source.

SOURCE: [13] The College of Physicians and Surgeons of Manitoba 1976-1982.

[14] Report of the Task Force on New Brunswick Health Care; January 1978.

[15] Projected Number of Active Civilian Physicians by Province, Canada 1973-1981; Health Manpower Planning Division; Department of National Health and Welfare; March 1974.

TABLE 143 NUMBER OF REGISTERED GENERAL PRACTITIONERS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	837[13]	915[13]	918[13]	887[13]	905[13]	992[13]	1021[13]
British Columbia	2224[2]	2294[2]	2386	2326[2]	2392[2]	2870*[2]	
Alberta	1304	1369	1547[1]	1567[1]			
Saskatchewan	712	770	763	790			
Ontario	8224[5]	8316[5]	8155[5]	8441[5]	8575[5]	8709[5]	
Quebec	3717	3985	4133	4373			
New Brunswick	392	399	400	391			
Nova Scotia	626	657	701	698			
Prince Edward Is.	87	84	91	95			
Newfoundland	431	432	416	416			
Yukon & Northwest Territories	35	48	53	51			
Canada	18599	19064	19563	20038			

* This includes the physicians in Family Practice.

SOURCE: [13] The College of Physicians and Surgeons of Manitoba; 1975-1982.

PHYSICIAN: SPECIALTY - ANAESTHESIA

TABLE 144 NUMBER OF ANAESTHETISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	49[13]	48[13]	52[13]	51[13]	50[13]	54[13]	61[13]
British Columbia	187	199[2]	207[2]	215[2]	226[2]	234[2]	
Alberta	102	101[1]	111	109			
Saskatchewan	30	27	28	29			
Ontario	554[5]	557[5]	559[5]	538[5]	565[5]	567[5]	
Quebec	441	440	437	436			
New Brunswick	30	30	27	27			
Nova Scotia	35	35	38	36			
Prince Edward Is.	3	3	4	4			
Newfoundland	13	12	10	11			
Yukon & Northwest Territories							
Canada	1444	1452	1473	1456			

Note:

Definition of Specialty - "Anaesthesia is the specialty of medicine primarily concerned with the prevention of pain and with life support during surgical intervention."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Anaesthesia; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - CARDIOVASCULAR AND THORACIC SURGERY

TABLE 145 NUMBER OF CARDIOVASCULAR AND THORACIC SURGEONS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	7[13]	5[13]	8[13]	10[13]	10[13]	11[13]	11[13]
British Columbia	11	14[2]	14[2]	15[2]	16[2]	18[2]	
Alberta	10	10	10	13[1]			
Saskatchewan	5	7	6	6			
Ontario	18[5]	22[5]	55[5]	57[5]	59[5]	61[5]	
Quebec	56	57	59	59			
New Brunswick		1	1	1			
Nova Scotia	3	4	4	5			
Prince Edward Is.							
Newfoundland	4	4	4	4			
Yukon & Northwest Territories			1				
Canada	114	124	162	170			

Note:

Definition of Specialty - "Cardiovascular and thoracic surgery is the specialty of medicine concerned with surgery of congential and acquired disease of the heart and great vessels, chest wall, medeastinum, pleura, lungs, oesophagus and perycheral arteries."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Cardiovascular and Thoracic Surgery; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - DERMATOLOGY

TABLE 146 NUMBER OF DERMATOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	5[13]	7[13]	8[13]	9[13]	9[13]	11[13]	10[13]
British Columbia	35[2]	39[2]	43[2]	44[2]	43[2]	45[2]	
Alberta	9	11[1]	14	14[1]			
Saskatchewan	3	3	4	3			
Ontario	118[5]	124[5]	129[5]	130[5]	131[5]	132[5]	
Quebec	99	104	105	111			
New Brunswick	1	1	1	1			
Nova Scotia	6	5	6	5			
Prince Edward Is.							
Newfoundland	1	1	2	1			
Yukon & Northwest Territories			1				
Canada	277	295	312	318			

Note:

Definition of Specialty - "Dermatology is the specialty of medicine concerned with the diagnosis, treatment and care of patients with diseases of the skin, skin appendages, mucous membrane and venereal disease."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Dermatology; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - GENERAL SURGERY

TABLE 147 NUMBER OF GENERAL SURGEONS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	90[13]	95[13]	95[13]	93[13]	88[13]	84[13]	79[13]
British Columbia	244	256[2]	259[2]	261[2]	259[2]	267[2]	
Alberta	156	148[1]	156	140[1]			
Saskatchewan	76	78	78	74			
Ontario	849[5]	849[5]	680[5]	665[5]	651[5]	638[5]	
Quebec	620	619	603	608			
New Brunswick	64	62	60	58			
Nova Scotia	101	98	98	97			
Prince Edward Is.	9	10	11	11			
Newfoundland	39	38	41	37			
Yukon & Northwest Territories	4		7	4			
Canada	2252	2253	2088	2048			

Note:

Definition of Specialty - "General Surgery is the specialty of medicine concerned with the non-operative and operative management of conditions potentially treated by an operative procedure, it also includes management of those conditions associated with the preparation for, or care after, surgical treatment. It does not include those surgical conditions falling exclusively within the domain of other surgical specialties."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in General Surgery; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - INTERNAL MEDICINE

TABLE 148 NUMBER OF INTERNISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	121[13]	137[13]	142[13]	145[13]	150[13]	150[13]	160[13]
British Columbia	277[2]	302[2]	316[2]	329[2]	342[2]	364[2]	
Alberta	167	184[1]	204	182[1]			
Saskatchewan	60	71	73	74			
Ontario	1039[5]	1076[5]	1147[5]	1182[5]	1217	1252	
Quebec	1042	1065	1068	1124			
New Brunswick	42	42	45	46			
Nova Scotia	74	83	90	92			
Prince Edward Is.	8	10	10	10			
Newfoundland	40	39	39	46			
Yukon & Northwest Territories	2	2	3	2			
Canada	2872	3137	3173	3233[13]			

Note:

Definition of Specialty - "Internal Medicine is the specialty of medicine concerned with the diagnosis and medical treatment of diseases and disorders of the internal structures of the adult human being."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Internal Medicine; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - NEUROLOGY

TABLE 149 NUMBER OF NEUROLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	8[13]	8[13]	10[13]	10[13]	11[13]	11[13]	12[13]
British Columbia	31	29[2]	29[2]	33[2]	36[2]	38[2]	
Alberta	16	16[1]	17	17[1]			
Saskatchewan	5	6	8	9			
Ontario	82[5]	91[5]	91[5]	95[5]	103[5]	107[5]	
Quebec	131	135	137	142			
New Brunswick	2	2	1	2			
Nova Scotia	7	7	8	9			
Prince Edward Is.							
Newfoundland	4	5	4	4			
Yukon & Northwest Territories							
Canada	286	299	305	321			

Note:

Definition of Specialty - "Neurology is the specialty of medicine concerned with the growth and development of the normal function of the central nervous and peripheral neuro-muscular system, and with the prevention, detection, investigation, diagnosis and treatment of these disorders."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Neurology; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - NEUROSURGERY

TABLE 150 NUMBER OF NEUROSURGEONS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	4[13]	4[13]	5[13]	4[13]	4[13]	4[13]	5[13]
British Columbia	21	22[2]	23[2]	22[2]	25[2]	27[2]	
Alberta	13	13[1]	15	14[1]			
Saskatchewan	7	4	5	5			
Ontario	50[5]	50[5]	48[5]	49[5]	50[5]	51[5]	
Quebec	49	51	51	49			
New Brunswick	4	5	5	5			
Nova Scotia	4	6	4	5			
Prince Edward Is.							
Newfoundland	2	2	2	2			
Yukon & Northwest Territories							
Canada	154	157	158	155			

Note:

Definition of Specialty - "Neurosurgery is the specialty of medicine concerned with the diagnosis and surgical management (both operative and non-operative) of patients with disorders affecting the central peripheral system."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Neurosurgery; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - OBSTETRICS AND GYNAECOLOGY

TABLE 151 NUMBER OF OBSTETRICIANS/GYNAECOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	58[13]	54[13]	58[13]	59[13]	59[13]	62[13]	65[13]
British Columbia	125	133[2]	137[2]	140[2]	141[2]	148[2]	
Alberta	101	104[1]	107	103[1]			
Saskatchewan	27	30	32	32			
Ontario	527[5]	523[5]	496[5]	506[5]	516[5]	526[5]	
Quebec	379	378	382	398			
New Brunswick	27	25	28	28			
Nova Scotia	29	29	31	30			
Prince Edward Is.	6	7	7	7			
Newfoundland	13	15	17	17			
Yukon & Northwest Territories	2	1	1	1			
Canada	1294	1299	1296	1321			

Note:

Definition of Specialty - "Obstetrics and Gynaecology are the specialities of medicine concerned with the total health care of women related to reproduction and reproductive organs."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Obstetrics and Gynaecology; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - OPTHALMOLOGY

TABLE 152 NUMBER OF OPHTHALMOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	31[13]	31[13]	29[13]	27[13]	26[13]	26[13]	31[13]
British Columbia	119	123[2]	126[2]	132[2]	135[2]	140[2]	
Alberta	57	56[1]	55	54[1]			
Saskatchewan	21	23	23	22			
Ontario	300[5]	307[5]	289[5]	292[5]	295[5]	298[5]	
Quebec	215	218	213	230			
New Brunswick	16	16	16	16			
Nova Scotia	30	31	33	32			
Prince Edward Is.	2	2	2	3			
Newfoundland	5	5	8	8			
Yukon & Northwest Territories							
Canada	792	807	794	816			

Note:

Definition of Specialty - "Ophthalmology is the medical science concerned with the structure, function, and diseases of the eye and of the visual system."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Ophthalmology; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - ORTHOPAEDIC SURGERY

TABLE 153 NUMBER OF ORTHOPAEDIC SURGEONS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	32[13]	32[13]	29[13]	31[13]	32[13]	34[13]	42[13]
British Columbia	86	95[2]	99[2]	103[2]	109[2]	115[2]	
Alberta	54	52[1]	58	57[1]			
Saskatchewan	20	20	20	21			
Ontario	216[5]	222[5]	229[5]	234[5]	239[5]	244[5]	
Quebec	235	243	239	247			
New Brunswick	16	17	18	20			
Nova Scotia	9	10	11	11			
Prince Edward Is.	2	2	1				
Newfoundland	8	8	9	10			
Yukon & Northwest Territories	1		1	1			
Canada	679	701	714	735			

Note:

Definition of Specialty - "Orthopaedic Surgery is the specialty of medicine concerned with the prevention, diagnosis and treatment of diseases, abnormalities and injuries which affect the musculoskeletal system."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Orthopaedic Surgery; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - OTOLARYNGOLOGY

TABLE 154 NUMBER OF OTOLARYNGOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	19[13]	17[13]	19[13]	19[13]	19[13]	23[13]	22[13]
British Columbia	54	55[2]	56[2]	56[2]	59[2]	62[2]	
Alberta	24	27[1]	27	29[1]			
Saskatchewan	11	11	9	10			
Ontario	193[5]	197[5]	205[5]	208[5]	211[5]	214[5]	
Quebec	164	168	171	169			
New Brunswick	13	13	13	13			
Nova Scotia	14	15	16	16			
Prince Edward Is.	2	1	1	1			
Newfoundland	2	2	3	4			
Yukon & Northwest Territories			1	1			
Canada	496	506	521	526			

Note:

Definition of Specialty - "Otolaryngology is the specialty of medicine concerned with the provision of health care for problems involving the ears, nose, throat and larynx and their related structures, including the neck, the bronchi and oesophagus."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party on Otolaryngology; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - DIAGNOSTIC RADIOLOGY

TABLE 155 NUMBER OF DIAGNOSTIC RADIOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	48[13]	51[13]	48[13]	46[13]	48[13]	51[13]	42[13]
British Columbia	152	180[2]	185[2]	197*[2]	204*[2]	208*[2]	
Alberta	96	94[1]	94	96[1]			
Saskatchewan	40	35	36	39			
Ontario	461[5]	472[5]	458[5]	460[5]	462[5]	464[5]	
Quebec	370	379	379	392			
New Brunswick	30	30	31	31			
Nova Scotia	46	46	49	48			
Prince Edward Is.	5	5	3	3			
Newfoundland	13	13	18	18			
Yukon & Northwest Territories							
Canada	1261	1305	1301	1330			

* This statistic includes Diagnostic Radiology, Therapeutic Radiology, and Radiation Oncology.

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

Note:

Definition of Specialty - "Diagnostic Radiology is the specialty of medicine concerned with the use of ionizing radiation in the diagnosis of patient care. These radiations are produced by x-ray tubes, radium or radioactive isotopes. It has recently been extended to include the use of other non-radioactive methods such as ultrasound and infrared (thermography)."[14]

SOURCE: [14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Diagnostic Radiology; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - GENERAL PATHOLOGY

TABLE 156 NUMBER OF PATHOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	28[13]	34[13]	33[13]	32[13]	34[13]	37[13]	37[13]
British Columbia	76	86[2]	90[2]	96[2]	103[2]	107[2]	
Alberta	59	67*[1]	70	56[1]			
Saskatchewan	17	19	21	21			
Ontario	230[5]	282	295	289			
Quebec	212	222	223	222			
New Brunswick	14	12	12	12			
Nova Scotia	26	28	29	28			
Prince Edward Is.	2	2	2	2			
Newfoundland	10	9	12	11			
Yukon & Northwest Territories							
Canada	674	761	789	772			

* Includes those physicians in the following specialties; Anatomical Pathology, General Pathology, Haematological Pathology, Medical Biochemistry and Microbiology.

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

PHYSICIAN: SPECIALTY - PAEDIATRICS

TABLE 157 NUMBER OF PAEDIATRICIANS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	68[13]	68[13]	73[13]	67[13]	77[13]	82[13]	86[13]
British Columbia	131	144[2]	142[2]	150[2]	160[2]	164[2]	
Alberta	80	87[1]	90	93[1]			
Saskatchewan	31	33	33	38			
Ontario	467[5]	489[5]	436[5]	446[5]	456[3]	466[3]	
Quebec	348	368	372	372			
New Brunswick	16	18	18	19			
Nova Scotia	32	36	36	37			
Prince Edward Is.	3	3	3	3			
Newfoundland	24	26	29	30			
Yukon & Northwest Territories							
Canada	1200	1272	1232	1255			

Note:

Definition of Specialty - "Paediatrics is the specialty of medicine concerned with the health care of the individual from conception to the end of adolescence. Paediatric care is achieved through genetic and family counselling, supervision of growth and development in relation to total environment and the prevention and treatment of disease."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Paediatrics: Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - PHYSICIAL MEDICINE AND REHABILITATION

TABLE 158 NUMBER OF PHYSIATRISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	3[13]	2[13]	2[13]	3[13]	5[13]	4[13]	5[13]
British Columbia	9	13[2]	15[2]	17[2]	16[2]	19[2]	
Alberta	5	5[1]	6	7[1]			
Saskatchewan	5	5	5	5			
Ontario	45[5]	45[5]	50[5]	51[5]	52[5]	53[5]	
Quebec	51	49	50	50			
New Brunswick	2	2	2	3			
Nova Scotia	5	3	5	5			
Prince Edward Is.		1	1				
Newfoundland							
Yukon & Northwest Territories							
Canada	125	125	136	142			

Note:

Definition of Specialty - "Physical Medicine and Rehabilitation (Physiatry) is the specialty of medicine concerned with the diagnosis and management of the medical disorders of the locomotor system, including the prevention of disabling conditions, and an understanding of the principles of rehabilitation for the whole range of injury and disease."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Physical Medicine and Rehabilitation; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - PLASTIC SURGERY

TABLE 159 NUMBER OF PLASTIC SURGEONS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	6[13]	4[13]	4[13]	4[13]	6[13]	6[13]	8[13]
British Columbia	21	25[2]	28[2]	29[2]	31[2]	30[2]	
Alberta	13	16[1]	15	18[1]			
Saskatchewan	5	4	5	7			
Ontario	67[5]	72[5]	87[5]	89[5]	91[5]	93[5]	
Quebec	63	69	72	77			
New Brunswick	4	5	5	5			
Nova Scotia	4	3	3	3			
Prince Edward Is.	1	1	1	1			
Newfoundland	1	1		1			
Yukon & Northwest Territories							
Canada	185	200	220	234			

Note:

Definition of Specialty - "Plastic surgery is the specialty of medicine concerned with the surgical restoration of appearance and function altered by injury, time or disease, with special emphasis on the hand, head and neck area and the integrementary system."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Plastic Surgery; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - PSYCHIATRY

TABLE 160 NUMBER OF PSYCHIATRISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	71[13]	80[13]	83[13]	84[13]	85[13]	85[13]	83[13]
British Columbia	208	212[2]	227[2]	246[2]	262[2]	272[2]	
Alberta	87	85[1]	100	93[1]			
Saskatchewan	39	40	40	35			
Ontario	771[5]	833[5]	892[5]	904[5]	916[5]	928[5]	
Quebec	610	633	616	652			
New Brunswick	20	21	24	23			
Nova Scotia	50	54	58	59			
Prince Edward Is.	3	3	3	4			
Newfoundland	17	21	21	23			
Yukon & Northwest Territories							
Canada	1876	1982	2064	2123			

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

Note:

Definition of Specialty - "Psychiatry is the specialty of medicine concerned with the diagnosis, treatment and rehabilitation of psychiatric disorder, which the psychoses, neuroses, personality problems and severe psychogenic reactions as listed in the International Classification of Disease Glossary. Social problems, while frequently related to psychiatric problems do not necessarily fall into the treatment area of psychiatry. The specialty of psychiatry aims for prevention at the secondary and tertiary levels at this stage but ideally wishes to deal with prophylasix at the primary level."[14]

SOURCE: [14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Psychiatry; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - PUBLIC HEALTH

TABLE 161 NUMBER OF PUBLIC HEALTH SPECIALISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	1[13]	1[13]	1[13]	1[13]	1[13]	[13]	3[13]
British Columbia	24	29[2]	31	31	35[2]	33[2]	
Alberta	7	3[1]	7	6			
Saskatchewan	1	1	1	1			
Ontario	35[5]	37[5]	159[5]	160[5]	161[5]	162[5]	
Quebec	77	72	72	68			
New Brunswick	2	3	3	3			
Nova Scotia	12	10	9	7			
Prince Edward Is.							
Newfoundland				1			
Yukon & Northwest Territories							
Canada	159	156	283	278			

Note:

Definition of Specialty - "Public Health is the specialty of medicine concerned with the promotion, protection and restoration of health by organized community action."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; Report of the Working Party in Public Health; Published by authority of the Minister of National Health and Welfare.

PHYSICIAN: SPECIALTY - UROLOGY

TABLE 162 NUMBER OF UROLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	20[13]	22[13]	19[13]	19[13]	19[13]	22[13]	25[13]
British Columbia	49	56	56[2]	58[2]	59[2]	61[2]	
Alberta	26	29[1]	31	30[1]			
Saskatchewan	18	17	18	17			
Ontario	141[5]	143[5]	160[5]	162[5]	164[5]	166[5]	
Quebec	121	123	124	121			
New Brunswick	13	14	14	14			
Nova Scotia	13	15	14	15			
Prince Edward Is.	2	2	2	2			
Newfoundland	5	6	8	9			
Yukon & Northwest Territories							
Canada	408	427	446	447			

Note:

Definition of Specialty - "Urology is the specialty of medicine concerned with the diagnosis and treatment of diseases of the adrenals, the urinary tract and the male reproductive tract."[14]

SOURCE: [13] The College of Physicians and Surgeons of Manitoba, 1976-1982.

[14] National Committee on Physician Manpower Requirements for Physicians in Canada; *Report of the Working Party in Urology*; Published by authority of the Minister of National Health and Welfare.

TRAINING - PHYSICIANS

TABLE 163 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[14]	1978[14]	1979[14]	1980[14]	1981	1982
Manitoba	94[13]	98[13]	96[13]	91[13]	95[13]	97[13]	86[13]
British Columbia	83	79	79	75	80	87[2]	92[2]
Alberta	173	178	180	190	181		
Saskatchewan	60[9]	64[9]	64	65	60		
Ontario	573[5]	567[5]	602[5]	616[5]	623[5]	611	
Quebec	592	553	596	572	585		
New Brunswick							
Nova Scotia	91	91	92	87	90		
Prince Edward Is.							
Newfoundland	53	56	50	60	56		
Yukon & Northwest Territories							
Canada	1728	1699	1759	1756	1770		

SOURCE: [13] Faculty of Medicine, University of Manitoba.

[14] Association of Canadian Medical Colleges; Canadian Medical Education Statistics; 1978; 1980; 1981.

TABLE 164 NUMBER OF INTERNS AND RESIDENTS 1976-1982 BY PROVINCE, CANADA

Province	1976[1]	1977	1978[4]	1979[4]	1980[4]	1981	1982
Manitoba	287[13]	328[13]	321[13]	320[13]	336[13]	328[13]	350[13]
British Columbia	360	403[2]	424	395		359[2]	
Alberta	511	480	542	541			
Saskatchewan	177	181	194	190			
Ontario	2450	2616	2864	2838			
Quebec	2110	2020	1948	1925			
New Brunswick	60	58	58	44			
Nova Scotia	267	291	283	322			
Prince Edward Is.	4	4	4	5			
Newfoundland	145	162	164	167			
Yukon & Northwest Territories				1			
Canada	6371	6543	6802	6748			

SOURCE: [13] Manitoba affiliated Teaching Hospitals.

[14] Health Economics and Statistics Division; Active Civilian Physicians in Canada 1968-1976; p. 33.

CATEGORY: Physiotherapists

DEFINITION: "Plans and carries out programs of physical treatment, as directed by physician, to rehabilitate injured or disabled persons: Applies diagnostic muscle, nerve, joint and functional ability tests, and assesses patients; symptoms and capabilities. Directs and aids patients individually or in groups, in activities designed to assist in muscle restoration and joint mobility, using equipment, such as parallel bars, weights, ramps, steps and tractions. Gives whirlpool and contrast baths and applies moist packs. Gives electrotherapeutic treatments, using equipment, such as diathermy, ultrasonic and microwave machines, infra-red and ultra-violet lamps and low-voltage generators. Instructs patients in procedures to be continued at home. Keeps records of treatments given, patients' responses and progress." (Revised C.C.D.O. '80, p. 49)

TABLE 165 NUMBER OF PHYSIOTHERAPISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PHYSIOTHERAPISTS 1983-1986 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[13] 1978	* [13] 1979	[13] 1980	[13] 1981	[13] 1982	1983	1984	1985	1986
Central	3	3	4	5	6	5	7	7	7	7	7
Eastman	1	1	5	5	1	5	4	4	4	4	5
Interlake	1	1	1	3	2	4	4	4	4	4	4
Norman	5	10	11	3	3	3	3	3	3	3	3
Parklands	1	5	5	5	4	4	2	2	2	2	2
Thompson				7	7	7	7	7	7	8	8
Westman	19	27	20	23	22	21	29	29	29	29	30
Winnipeg	169	225	206	218	242	244	243	246	249	252	255
Manitoba	199	272	252	269	286	293	299	302	305	309	314

* Number of Registered Physiotherapists employed Full Time, Part Time, Unemployed, and other by geographic location in Manitoba.

SOURCE: [13] Correspondence; Registrar; The Association of Physiotherapists of Manitoba; June 1976; August 1977; April 1978; May 22, 1979; November 1980; July 1981; July 1982.

TRAINING - PHYSIOTHERAPISTS

TABLE 166 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION, MANITOBA

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	63	65	59	35	28	48	39*
Manitoba	63	65	59	35	28	48	39

Note: The diploma program in Physiotherapy has been discontinued. 1978 was the last year that there were graduates in this program.[13]

*This statistic includes students who previously completed the diploma program and who returned to acquire a degree.

SOURCE: [14] Correspondence; Division of Physical Therapy, School of Medical Rehabilitation; August 1977; October 1977; July 1978; May 3, 1979; July 4, 1980; June 23, 1981; July 21, 1982.

TABLE 167 NUMBER OF ACTIVE PHYSIOTHERAPISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	199[13]	209[13]	220[13]	228[13]	255[13]	269[13]	269[13]
British Columbia	480	602[2]	535	720[2]	802[2]		
Alberta	348	354	323	349			
Saskatchewan	221[9]	235[9]	259[9]				
Ontario	2180[5]	2269[5]	2354[5]	2448[5]	2549[5]	2614[5]	
Quebec	283	257	233	254			
New Brunswick	51	51	47	56			
Nova Scotia	87	88	96	91			
Prince Edward Is.	16	17	14	15			
Newfoundland	37	34	35	37			
Yukon & Northwest Territories	5	3	4	5			
Canada	3907	4119	4120				

SOURCE: [13] Correspondence; Registrar; The Association of Physiotherapists of Manitoba; June 1976; August 1977; April 1978; May 1979; November 1980; November 2, 1981; July 21, 1982.

TABLE 168 NUMBER OF PHYSIOTHERAPISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	199[13]	272[13]	252[13]	269[13]	286[13]	293[13]	299[13]
British Columbia	651	877[2]	668	1142[2]		1274[2]	
Alberta	521	492	472	507			
Saskatchewan	221[9]	235[9]	259[9]				
Ontario	2072	1930	1913	1969			
Quebec	548	383	423	454			
New Brunswick	62	62	55	66			
Nova Scotia	115	114	150	159			
Prince Edward Is.	17	19	19	21			
Newfoundland	41	40	40	43			
Yukon & Northwest Territories	7	5	10	10			
Canada	4454	4328	4261				

SOURCE: [13] Correspondence; Registrar; The Association of Physiotherapists of Manitoba; April 1975; June 1976; August 1977; April 1978; May 22, 1979; November 1980; July 1981; July 21, 1982.

TRAINING - PHYSIOTHERAPISTS

TABLE 169 NUMBER OF GRADUATES OF DEGREE PROGRAMS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	20[13]	25[13]	17[13]	35[13]	28[13]	48[13]	39[13]
British Columbia*	36[2]	33[2]	43[2]	35[2]	39[2]	39[2]	39[2]
Alberta	17[1]	56[1]	56[1]	60[1]	62[1]	47[1]	
Saskatchewan	3[9]	3[9]	7[9]				
Ontario	104	104[5]	104[5]	130[5]	123[5]		
Quebec	143	160	148	170			
New Brunswick							
Nova Scotia			**	25			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	323	381	375				

* These are graduates of a combined program in Occupational Therapy and Physiotherapy.

** New degree program is in the process of being implemented at Dalhousie University.

SOURCE: [13] Correspondence; Division of Physical Therapy; School of Medical Rehabilitation; April 1975; August 1976; October 1977; July 1978; May, 1979; July 4, 1980; June 23, 1981; July 21, 1982.

TRAINING - PHYSIOTHERAPISTS

TABLE 170 NUMBER OF GRADUATES OF DIPLOMA PROGRAMS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978	1979	1980	1981	1982
Manitoba*	36[13]	40[13]	42[13]				
British Columbia							
Alberta*	33[1]	32[1]					
Saskatchewan	16[9]	16[9]	13[9]				
Ontario	14	18[5]	19[5]	21[5]	15[5]	18[5]	
Quebec							
New Brunswick							
Nova Scotia*	15	17					
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	116	123	74				

* Diploma in Physiotherapy is no longer offered.

SOURCE: [13] Correspondence; Division of Physical Therapy; School of Medical Rehabilitation; August 1975; August 1977; October 1977; July 1978; May 3, 1979.

TRAINING - PHYSIOTHERAPISTS

TABLE 171 NUMBER OF GRADUATES OF BASIC PROGRAMS, DEGREE AND DIPLOMA 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	56[13]	65[13]	50[13]	35[13]	28[13]	48[13]	39[13]
British Columbia	36[2]	33[2]	43[2]	35[2]	39[2]	39[2]	39[2]
Alberta	50[1]	88[1]	56*[1]	60[1]	62[1]	47[1]	
Saskatchewan	16[9]	16[9]	20**[9]				
Ontario	118	122[5]	123[5]	130[5]	123[5]	130[5]	
Quebec	143	160	148	170			
New Brunswick							
Nova Scotia	17	17		25			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	439	502	440				

* Before 1978, students could obtain a diploma in physical therapy at the end of the third year. After 1978, however, the 4 year degree program become compulsory.

** 13 were graduates of the three year diploma course and 7 were graduates from the baccalaureate program.

SOURCE: [13] Correspondence; Registrar, The Association of Physiotherapists of Manitoba; April 1975; June 1976; August 1977; April 1978; May 22, 1979; July 4, 1980; June 23, 1981; July 21, 1982.

CATEGORY: **Physiotherapy Assistant**

DEFINITION: **Prepare patient for treatment by physiotherapist:**

Assists patients in dressing and undressing. Position patient for physiotherapy treatment. Assist in fitting patients with crutches, splints and other devices. Change linen on beds with treatment tables and clean work area. Inspect physiotherapy equipment for defects, if required. Perform porter and clerical duties within department, if required. (Revised C.C.D.O. '80, p. 50)

TABLE 172 NUMBER OF PHYSIOTHERAPY ASSISTANTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PHYSIOTHERAPY ASSISTANTS 1983-1986 BY MANITOBA REGION

Region	1976[8]	1977*	1978[8]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central				2	6	2	2	2	2	2	2
Eastman							1	1	1	1	1
Interlake											
Norman			5	4	3	5	3	3	3	3	3
Parklands	2		2	2	1	2	3	3	3	3	3
Thompson							2	2	2	2	2
Westman	3		14	3	3	4	18	18	18	18	18
Winnipeg	50		65	36	23	45	54	54	55	55	56
Manitoba	55		86	47	36	58	83	83	84	84	85

* Data not available for 1977. Staffing reports from the hospitals and nursing homes were done in 1977.

SOURCE: [13] Unpublished survey results; Department of Health; August 20, 1979; August 26, 1980; August 21, 1981; August 1982.

Training

Physiotherapy Assistant training is done on an "on-the-job" basis therefore, statistical information on numbers trained is not available.

Information on the supply, distribution and training of Physiotherapy assistants (or the equivalent category) across Canada is not available.

CATEGORY: Play Therapist; also known as 'Child Life Therapist'

DEFINITION: "Assists in planning, organizing and directing program to provide patients with recreational activities as an aid to rehabilitation".

Determines, in conjunction with physician, program of activities to provide mental and physical stimulation to rehabilitate patients. Directs activities, such as games, dramatics, adapted sports, and social activities in accordance with patients' capabilities, needs and interests. Prepares reports describing patients' reactions and symptoms indicative of progress or regression.

May work with children only and be designated accordingly, Play Therapist." (C.C.D.O. '71, p. 128)

Functions of Child Life Therapist:

1. To be the child's advocate.
2. To be responsible for carrying out a program of therapeutic play to meet the emotional needs of the patients on her/his ward.
3. To be knowledgeable in growth and developmental stages of children.
4. To demonstrate effective observational skills continually on the ward, and where necessary, initiate consults to other departments.
5. To do assessments of patients when requested by other departments.
6. To work closely with nursing and medical staff on the ward in preparing child for surgery, medical procedures, and hospitalization.
7. To be supportive to members of staff and parents, and above all to the child in stressful situations.
8. To participate in Child Life Clinics in order to share experiences.
9. To be willing to initiate and participate in ward conferences on needs of patients and to discuss approaches and goals.
10. To take part frequently in reports with Head Nurse, to learn about each child's medical diagnosis and prognosis.
11. To participate in weekly social service rounds - to discuss patient and family problems in order to be supportive during illness.
12. To research and share articles of interest.
13. To work closely with staff of "Services to Native Children".
14. To supervise and train nursing, college and University students on the ward to facilitate an awareness of developmental and emotional needs of children, through play.

15. To fulfill request for Child Life services required by children in other areas of the hospital complex.

16. To be responsible for purchasing and maintenance of toys and equipment for her/his ward.

17. To provide visual stimulation and comfort throughout the hospital to create a pleasant and relaxed environment.

18. To share and carry out office duties until such time that funds will permit an office clerk or secretary to be employed in the department.

The Child Life Therapist must be intensely aware of the need to grow and to keep an open mind at all times when taking part in learning programs and discussions. Knowledge gained will not only be for the betterment of the hospitalized child, but will enhance the therapist's own growth and also the growth and development of the Child Life Department.

---

12. Correspondence, Mr. W.K. Byron, Personnel; Health Sciences Centre; July 22, 1976.

TABLE 173 NUMBER OF PLAY THERAPISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PLAY THERAPISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[14]	1980[14]	1981[15]	1982[15]	1983	1984	1985	1986
Central											
Eastman											
Interlake											
Norman				4							
Parklands				1							
Thompson											
Westman											
Winnipeg	15	22	22	18	15	12	13	13	13	14	14
Manitoba	15	22	22	23	15	12	13	13	13	14	14

SOURCE: [13] Correspondence; Health Sciences Centre; External Agencies; Department of Health and Social Development; Rehabilitation Centre for Children; Misericordia General Hospital; St. Amant Centre; May 1976; May 1977; June 1978.

[14] Unpublished Survey Results; Department of Health; August 20, 1979; August 27, 1980; External Agencies; Department Health; June 1978; June 8, 1979; October 6, 1980.

[15] Telephone Survey; Children's Hospital, Health Sciences Centre; Misericordia Hospital; St. Amant Centre; St. Boniface Hospital; November 5, 1981; August 1982.

Training

Those who are classified as "Play Therapists" come from a variety of educational backgrounds.

Information on the category of "Play Therapists" in other provinces was not available.

CATEGORY: Podiatrists

DEFINITION: Diagnose and treat diseases, disorders and deformities of human foot:

Diagnose turmors, ulcers, fractures, skin and nail diseases and deformities, using blood analysis, urinalysis, x-rays and other tests. Treat flat or weak feet, foot imbalance and other deformities, using electrical and mechanical techniques. Treat corns, calluses, ingrown nails and other disorders, using surgical tools. Prescribe and administer medications. Correct deformities, using plaster casts, strappings, braces and prosthetic devices. Prescribe corrective footwear. Advise patients concerning treatment of disorders and proper foot care. Refer patients to physicians when symptoms observed in feet and legs indicate systemic disorders. (Revised C.C.D.O. '80, p. 14)

CATEGORY: Chiropodists

DEFINITION: Chiropodist means..., "a person who practices or advertises or holds himself out in any way as practising Chiropody and massage ... not includ(ing) amputation of, or treatment of injuries to, or infection of, the foot, toes, hand or fingers; or manicuring the hands; or the use of anaesthetic except as a spray; or the use of drugs or medicines other than local antiseptics."[13]

Note: As the official act regulating these workers in Manitoba is The Chiropody Act, please refer to pages 30 to 32.

---

[13] Correspondence; Operational Support Services, Department of Health and Social Development; November 25, 1975.

CATEGORY: Prosthetist - Orthotist

DEFINITION:

1. "As a Member of the Clinic Team:

   - Advise the team on the design of a prosthetic/orthotic device; including the socket; the method of suspension and the selection of proper components;
   - Advise the team and participates directly in the evaluation of the final design including fit, function, and cosmesis;
   - Records and reports any pertinent information regarding patients and patients' families;
   - Assists and advises in the pre-surgical planning and in the post-surgical management requiring prosthetic/orthotic services.

2. In the Provision of Prosthetic/Orthotic Appliances:

   - Makes all necessary casts and measurements of patients and records all pertinent information;
   - Performs all modifications of positive models, or formulates socket plans and lay-out;
   - Formulates prosthesis or orthosis design including model and pattern making and the selection of materials (this includes orthopaedic footwear in consultation with shoe-maker);
   - Performs fitting and the static and dynamic alignment of devices on patients;
   - Evaluates the device on the patient to assure the maxima of fit, function, cosmesis and workmanship;

3. In the Administration and Management:

   - Supervises the activities of the prosthetic/orthotic technican supporting him;
   - Manages and conducts "on the job" and apprenticeship training programmes for prosthetic/orthotic technician trainees;
   - Manages Laboratory activities assigned to him, including inventory control, use of tools and equipment, safety, financial and personnel matters, necessary record keeping, etc.;
   - Devises improved job methods for increasing efficiency;

4. **In General**

- Keeps abreast of all new developments concerning prosthetics/orthotics;
- Lectures and demonstrates to colleagues in his profession and others professionally concerned with prosthetics/orthotics and also to Community and Government Groups."[13]

---

[13] Excerpts from the United Nations Inter-Regional Seminar for the Training of Prosthotists; Held in Holte, Denmark; July 1 - 19, 1968.

TABLE 174 NUMBER OF PROSTHETISTS AND ORTHOTISTS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	10	9	10	8	11	11	14*
Manitoba	10	9	10	8	11	11	14

* In addition to these 14 prosthetists and orthotists presently on staff, another 3 are in training.

SOURCE: [13] Correspondence; Manitoba Association of Prosthetists and Orthotists; February 1, 1978; October 5, 1979; August 13, 1980; July 23, 1981; August 31, 1982.

Training

Formal courses for prosthetists and orthotists are not offered in Manitoba; however, it is possible for those enrolled in prosthetic and/or orthotic training programs to do their on-the-job training here. At present there are three trainees doing their apprenticeship in Manitoba.

TRAINING - PROSTHETISTS AND ORTHOTISTS

The Canadian Board for Certification of Prosthetists and Orthotists was granted incorporation in Canada on August 15, 1972. This organization was formed in 1966 for the purpose of recognizing and certifying those persons in Canada with proficiency in the field of Prosthetics and/or Orthotics.

To be a certified prosthetist and/or orthotist an individual must obtain the necessary educational experience and must complete and pass the Canadian Board for Certification of Prosthetists and Orthotists examination. (These examinations are held annually in the last week of May.)

To qualify for the examination a person must

be fluent in French and/or English
have graduated from Grade XII Selected or Combined Studies Program including English 12, Algebra 12, Physics 11 and
have at least five years experience in all phases of prosthetics and orthotics.

In addition to the on-the-job training obtained during the five year period, a candidate is required to take short term courses which are offered at the following universities in the United States:

1. U.C.L.A
2. Northwestern
3. New York

The short term courses are taken at different levels as the candidate progresses through their training program. These courses usually last from one to six weeks.

U.C.L.A. offers a one year diploma program which is actually an amalgamation of all the short-term courses.

Seattle University and New York offer a Bachelor of Science degree in Prosthetics/Orthotics.

There is also a course offered for Prosthetists/Orthotists at the Institute of Medical Rehabilitation in Montreal.

SOURCE: [12] Manitoba Association of Prosthetists and Orthotists.

TABLE 175 NUMBER OF CERTIFIED PROSTHETISTS AND ORTHOTISTS 1976-1982 BY PROVINCE, CANADA

Province	1976	1977[13]	1978	1979[14]	1980[14]	1981[14]	1982
Manitoba	10[13]	9	10[13]	8[13]	11[13]	11[13]	14[13]
British Columbia		12[2]	20[2]	13	15	19*[2]	
Alberta		18		12	19	14	
Saskatchewan		5		9	11	7	
Ontario	50[5]	51[5]	54[5]	59[5]	65[5]	75[5]	
Quebec		33		27	31	29	
New Brunswick		3		6	7	7	
Nova Scotia		5		5	5	5	
Prince Edward Is.				1			
Newfoundland		4		3	3	3	
Yukon & Northwest Territories							
Canada		161		143	167	171	

* Data revised as per source.

SOURCE: [13] Correspondence; Manitoba Association of Prosthetists and Orthotists; April 26, 1976; April 13, 1977; February 1, 1978; October 1979; August 13, 1980; July 23, 1981; August 31, 1982.

[14] Canadian Board for Certification of Prosthetists and Orthotists; List of Members in Good Standing.

Training

Information on prosthetists and orthotists being trained across Canada was not available.

CATEGORY: Prosthetic and Orthotic Technicians

DEFINITION:

1. In Direct Assistance to the Prosthetist/Orthotist:

   - Fabricates and assembles prosthetic/orthotic devices, including component parts, sockets, suspension systems as designed by the prosthetist/orthotist;
   - Performs bench alignment of the device to the specifications of the prosthetist/orthotist;
   - As directed, assists the prosthetist/orthotist in the fitting and aligning activities with patients;
   - Performs finishing operations on prostheses and orthoses, including the use of alignment transfer tools and equipment;
   - Reports any pertinent information regarding the device or the patient to the prosthetist/orthotist;

2. In General

   - Keeps abreast of new developments in materials, tools, equipment and processes which apply to his duties in the Laboratory;
   - Offers suggestions for improvement in job methods in the Laboratory;
   - Repairs prostheses or orthoses as assigned and directed by the prosthetist/orthotist;
   - Is responsible for the conduct for the "on the job" and apprenticeship training programmes for technician trainees as assigned by the prosthetist/orthotist;
   - Reports to the prosthetist/orthotist on special needs regarding Laboratory materials, equipment and tools;
   - Is responsible for the care and economy of use of Laboratory materials, equipment and tools;
   - May specialize in a method or process becoming a highly skilled craftsman with a particular material or method such as plastic lamination, shoe making, leather work, etc.;
   - May supervise a group of other technicians with related administrative and management duties.

TABLE 176 NUMBER OF PROSTHETIC AND ORTHOTIC TECHNICIANS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA

Region	1976	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg		15	15	17	21	16	12
Manitoba		15	15	17	21	16	* 12

* In addition there are 2 orthopaedic shoemakers on staff at Deer Lodge Hospital and one at the Health Sciences Centre.

SOURCE: [13] Correspondence; Manitoba Association of Prosthetists and Orthotists; February 1, 1978; October 1979; August 1980; July 23, 1981; August 31, 1982.

TABLE 177 NUMBER OF PROSTHETIC AND ORTHOTIC TECHNICIANS TRAINED 1976-1982 BY MANITOBA HEALTH REGION

Region	1976	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg		15	15	5	4	8	
Manitoba		15	15	5	4	8*	*

* The Vo-Tech program is not functioning on a regular basis, although parts of the program are being used on a limited basis.[13]

Note: The Manitoba Association of Prosthetics and Orthotics is currently operating an on-the-job training program for technicians who are employed with the industry.

An audio-visual training program, obtained from Vo-Tech (Area 916) Minnesota, has been integrated into the on-the-job training. Each of the two portions of this program (prosthetic, orthotic) takes approximately two years to complete. However, the length of this course is flexible depending on how long a person has been working in the prostheitc/orthotic field. If a person has been in this field for four or five years, this training program should be able to be finished in one year and a half.

A board examination is being established for technicians by the Canadian Certification Board for Prosthetists and Orthotists. This will enable technicians to obtain qualifications that will be recognized across Canada.

SOURCE: [13] Correspondence; Manitoba Association of Prosthetists and Orthotists; February 1, 1978; October 1979; August 1980; July 23, 1981; August 31, 1982.

Training Across Canada

The British Columbia Institute of Technology recently began an 18 month course in prosthetic and orthotic technology. The first graduates (7 of them) were issued their diplomas in 1982. Ten graduates are projected for 1984 and 10 for 1986.[2]

CATEGORY: Registered Psychiatric Nurses

DEFINITION: Provide nursing care to patients with mental and emotional problems in hospitals and clinics or in private homes:

Administer prescribed medications and treatments and attend to total nursing care of assigned patients. Observe, record and report symptoms and changes in patient's condition. Confer with psychiatrists, psychologists, social workers, occupational therapists and other specialists to evaluate patient's condition and to plan therapy. Encourage patients to participate in routine work functions and recreational, community and other activities to build up self-confidence and to develop relationships with others. Counsel patients at home or in clinic and evaluate patient's adjustment in community. (Revised C.C.D.O. '80, p. 79)

TABLE 178 NUMBER OF ACTIVE PRACTISING PSYCHIATRIC NURSES 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF ACTIVE PRACTISING PSYCHIATRIC NURSES 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	181	164	196	186	179	185	190	193	194	196	198
Eastman	7	10	9	16	6	14	13	13	14	14	15
Interlake	209	173	188	190	214	175	174	177	179	181	184
Norman	8	6	8	8	8	13	2	2	2	2	2
Parklands	5	7	11	14	8	17	17	17	17	17	17
Thompson							8	8	8	9	9
Westman	270	264	299	291	288	298	300	301	303	304	305
Winnipeg	155	142	170	189	196	228	240	243	246	249	251
Manitoba	835	766	890*	894	899	930	944	954	963	972	981

* This includes 9 Psychiatric Nurses who are in active practice but whose addresses are confidential.

SOURCE: [13] Registered Psychiatric Nurses Association of Manitoba; July 1976; June 1977; April 1978; May 17, 1979; May 12, 1980; June 30, 1981; April 22, 1982.

TABLE 179 NUMBER OF ASSOCIATE INACTIVE** MEMBERS OF THE REGISTERED PSYCHIATRIC NURSES ASSOCIATION 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF INACTIVE MEMBERS 1983-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]	1983	1984	1985	1986
Central	40	32	32	37	34	26	23	23	24	24	24
Eastman	4	4	7	9	7	7	6	6	6	7	7
Interlake	18	22	23	28	19	26	25	25	26	26	26
Norman	4	4	4	5	8	2	3	3	3	3	3
Parklands	4	6	11	6	11	4	5	5	5	5	5
Thompson											
Westman	44	41	42	55	43	37	24	24	24	24	24
Winnipeg	45	40	43	54	52	44	49	50	50	51	51
Manitoba	159	149	162	194	174	146	135	136	138	140	140

** As of 1981, the previous category of Active Non-Practising Nurses has been subsumed under the category of Associate Inactive members. Thus, the figures have been revised to include members from both the previous categories of Inactive and Active Non- Practising members.

SOURCE: [14] Correspondence; Registered Psychiatric Nurses Association of Manitoba; July 1976; June 1977; April 1978; May 17, 1979; May 12, 1980; June 30, 1981; April 22, 1982.

TRAINING - REGISTERED PSYCHIATRIC NURSES

TABLE 180 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central	19	23	22	16	16	13	24
Eastman							
Interlake	25	28	31	22	18	9	27
Norman							
Parklands							
Thompson							
Westman	25	26	18	8	18	18	31
Winnipeg							
Manitoba	69	76	75	47	52	40	82

Note: Registered Psychiatric Nurses Training in Manitoba is conducted at Selkirk, Brandon and Portage la Prairie.

SOURCE: [13] Correspondence; School of Nursing; Portage la Prairie; Brandon; Selkirk; August 1976; June 1977; May 1978; July 5, 1979; July 9, 1980; June 23, 1981; July 20, 1982.

TABLE 181 NUMBER OF PSYCHIATRIC NURSES 1976-1982 BY PROVINCE, CANADA

Province	1976	1977	1978	1979	1980	1981	1982
Manitoba	1007[13]	915[13]	1073[13]	1088[13]	1073[13]	1089[13]	1079[13]
British Columbia	2482[2]	2355[2]	2365[2]	2365[2]		2319*[2]	
Alberta	435[1]	445[1]	469[1]	757[1]			
Saskatchewan	1068[9]	779[9]	807[9]				
Ontario							
Quebec							
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	4994	4494	4714				

* Only 1780 of these are active.

SOURCE: [13] Correspondence; Registered Psychiatric Nurses' Association of Manitoba; July 1976; June 1977; April 1978; May 17, 1979; May 12, 1980; June 30, 1981; April 22, 1982.

TRAINING - REGISTERED PSYCHIATRIC NURSES

TABLE 182 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976	1977	1978	1979	1980	1981	1982
Manitoba	69[13]	76[13]	75[13]	47[13]	52[13]	40[13]	82[13]
British Columbia	100[2]	59[2]	92[2]	101[2]	32*[2]	98[2]	106[2]
Alberta	41[1]	61[1]	31[1]	43[1]	38[1]	53[1]	
Saskatchewan	37[9]	52[9]	43[9]				
Ontario							
Quebec							
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	247	248	241				

* Data revised as per source.

Note: The approved schools of Psychiatric Nursing are located in Manitoba, Saskatchewan, Alberta and British Columbia.

Programs are of a two year duration and consist of classroom periods and controlled clinical experience.

Psychiatric nursing education in the four provinces is not standardized, therefore a Psychiatric Nurse qualified to practise in one province is not necessarily eligible to practise in another. A Psychiatric Nurse licensed in one province when moving to another province, must become licensed in the second province before commencing employment.

SOURCE: [13] Correspondence; Schools of Nursing; Portage la Prairie; Brandon; Selkirk; August 1976; June 1977; May 1978; July 5, 1979; July 9, 1980; June 23, 1981; July 20, 1982.

CATEGORY: Public Health Inspectors

DEFINITION: "Carries out specifically delineated programs which will assure compliance with the regulations under the Public Health Act, the Clean Environment Act, associated Municipal By-Laws and Clean Environment Commission Orders.

These program responsibilities relate to the safety of public and private water supplies, inspections of all food preparation and handling operations, private sewage disposal systems, bathing premises, housing campgrounds, barber shops and beauty parlors, waste disposal grounds, livestock production operations, response to complaints relating to littering and unsanitary conditions and primary investigations of some environmental accidents.

Interaction with other Departments produces activities with respect to residential and cottage subdivisions, epidemiological investigations, non-institutional care facilities, crown land reservations and correctional institutions".[13]

---

[13] Correspondence; Chief, Inspection Services; Department of Mines, Resources and Environmental Management; May 22, 1980.

TABLE 183 NUMBER OF PUBLIC HEALTH INSPECTORS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PUBLIC HEALTH INSPECTORS 1983-1986 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[13] 1978	[13] 1979	[13] 1980	[13] 1981	[13] 1982	1983	1984	1985	1986
Central	6	5	5	5	4	4	4	4	4	4	4
Eastman	3	5	5	5	5	5	5	5	5	5	6
Interlake	3	3	3	3	2	2	4	4	4	4	4
Norman	6	6	6	5	3	5	2	2	2	2	2
Parklands	5	6	6	5	4	5	4	4	4	4	4
Thompson	2	2	2	2	2	2	2	2	2	2	2
Westman	11	8	10	9	8	9	8	8	8	8	8
Winnipeg	[13] 44	[13] 43	[13] 44	[13] 30	*[14] 37	*[14] 39	[14] 39	40	40	40	41
Manitoba	80	78	81	64	*65	*71	68	69	69	69	71

* Data corrected.

SOURCE: [13] Chief, Inspection Services; Department of Consumer and Corporate Affairs and Environment; May 1976; June 1977; February 1978; May 2, 1979; May 22, 1980; June 5, 1981; May 18, 1982.

[14] Correspondence; Inner City Health Department, Winnipeg, Manitoba; July 1976; June 1977; May 1979; July 30, 1979; May 7, 1980; May 28, 1981; May 6, 1982.

Correspondence; Regional Supervisor, Eastern Region, Inspection Services, Department of the Environment; May 7, 1980; May 1981; May 6, 1982.

Training

Training programs for Public Health Inspectors are not available in Manitoba.

TABLE 184 NUMBER OF PUBLIC HEALTH INSPECTORS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	80[13]	78[13]	81[13]	64[13]	65[13]	71[13]	68[13]
British Columbia	185	176[2]	193	189[2]		186[2]	
Alberta	60	77	91	95			
Saskatchewan	68[9]	75[9]	73[9]				
Ontario	355	352	352	441			
Quebec	55	49	27	18			
New Brunswick							
Nova Scotia*	62	55	47	17			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	865	862	864				

* These figures include data for New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland.

SOURCE: [13] Correspondence; Chief, Inspection Services; Department of Mines, Resources and Environmental Management; May 1976; June 1977; February 1978; May 2, 1979; June 1981; May 1982; Inner City Health Department, Winnipeg, Manitoba; July 1976; June 1977; May 1978; July 30, 1979; May 1980; May 28, 1981; May 1982.

TRAINING - PUBLIC HEALTH INSPECTORS

TABLE 185 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba							
British Columbia	25[2]	36[2]	25[13]	40[13]	34[13]	22[13]	24[13]
Alberta							
Saskatchewan							
Ontario	82[14]	91[14]	73[14]	76[14]	63[14]	56[14]	*
Quebec	20[1]		8	7	11		
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	127	135	105	127			

* 1981 was the last year in which students graduated from the two year Public Health Inspection Certificate Program. This program is no longer offered. The new program consists of 4 academic years plus one calendar year of work experience acquired between fourth and fifth semesters. Graduates will be awarded the Bachelor of Applied Arts (Environmental Health) Degree. No graduates from this new program are anticipated until the Spring of 1984.[15]

There are two English speaking schools and one French speaking school that offer programs for Public Health Inspectors - B.C.I.T. (British Columbia), Ryerson (Ontario), and St. Hyacinth (Quebec).

SOURCE: [13] Correspondence; Department Head, Environmental Health Sciences; British Columbia Institute of Technology; May 1978; July 23, 1979; August 8, 1980; September 8, 1981; June 8, 1982.

[14] Correspondence; Departmental Assistant, Public Health Inspection Department; Ryerson Polytechnical Institute; June 1978; August 14, 1979; July 22, 1980; August 26, 1981.

[15] Correspondence; Minister of Social Affairs; Province of Quebec; September 1976.

CATEGORY: Radiological Technologists

DEFINITION: Medical Radiological Technicians (Diagnostic) operate radiography equipment to produce pictures of body structures for diagnostic purposes:

Explain treatment and reassure patient. Prepare drugs and chemicals for radiologist. Position patient according to part of body being x-rayed. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate beam, to regulate length and intensity of x-ray exposure and to expose film. Process and prepare films for interpretation by radiologist. Assist radiologist in fluoroscopy, cine-fluoroscopy and other diagnostic procedures. Operate radiography equipment in operating theatre or other specialized area to assist physician or surgeon. (Revised C.C.D.O. '80, p. 94)

Medical Radiological Technicians (Therapy) administer radiation treatment to patients as prescribed by radiation oncologist: Explain treatment and reassure patient. Position patient according to part of body being treated. Affix shields to protect unaffected areas of patient from radiation. Adjust equipment controls to collimate and direct radiation beam. Observe patient through window or on closed circuit television during treatment. Notify radiation oncologist if medical problems arise. Assist clinical physicist to prepare patient's treatment plan according to radiation oncologist's prescription. Prepare or assist in preparation of sealed radioactive substances for surface application or insertion into body cavities. (Revised C.C.D.O. '80, p. 95)

TABLE 186 NUMBER OF PRACTISING RADIOLOGICAL TECHNOLOGISTS - NUCLEAR MEDICINE 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PRACTISING RADIOLOGICAL TECHNOLOGISTS - NUCLEAR MEDICINE 1983-1986 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[13] 1978	[13] 1979	[13] 1980	[13] 1981	[13] 1982	1983	1984	1985	1986
Central							1	1	1	1	1
Eastman											
Interlake	1	1									
Norman		1									
Parklands											
Thompson											
Westman		3	2		1	1	2	2	2	2	2
Winnipeg	14	24	26	20	18	18	22	22	23	23	23
Manitoba	15	29	28	20	19	19	25	25	26	26	26

SOURCE: [13] Correspondence; Manitoba Society of Radiological Technologists Incorporated; May 20, 1976; July 17, 1977; September 1, 1978; September 1979; September 1980; November 1981; August 5, 1982.

TABLE 187 NUMBER OF PRACTISING AND NON-PRACTISING RADIOLOGICAL TECHNOLOGISTS - NUCLEAR MEDICINE - NUCLEOGRAPHERS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF RADIOLOGICAL TECHNOLOGISTS - NUCLEAR MEDICINE - NUCLEOGRAPHERS 1983-1936 BY MANITOBA REGION

Region	[14] 1976	[14] 1977	[14] 1978	[14] 1979	[14] 1980	[14] 1981	[14] 1982	1983	1984	1985	1986
Central							1	1	1	1	1
Eastman											
Interlake	1	1									
Norman		1				1					
Parklands											
Thompson							1	1	1	1	1
Westman		3	2		1	1	2	2	2	2	2
Winnipeg	15	25	29	24	20	24	23	23	24	24	24
Manitoba	16	30	31	24	21	26	27	27	28	28	28

SOURCE: [14] Correspondence; Manitoba Society of Radiological Technologists Incorporated; May 20, 1976; July 17, 1977; September 1, 1978, September 1979; September 1980; November 1981; August 5, 1982.

TABLE 188 NUMBER OF PRACTISING RADIOLOGY TECHNOLOGISTS - THERAPY 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PRACTISING RADIOLOGY TECHNOLOGISTS THERAPY 1983-1980 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central						1	1	1	1	1	1
Eastman					1	1	2	2	2	2	2
Interlake	1	1			1	1	1	1	1	1	1
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	13	19	20	26*	19	18	19	19	20	20	20
Manitoba	14	20	20	26	21	21	23	23	24	24	24

* One is qualified in Nuclear Medicine as well as Therapy and one is qualified in Radiology in addition to therapy.

SOURCE: [13] Correspondence; Manitoba Society of Radiological Technologists Incorporated; May 20, 1976; July 17, 1977; September 1, 1978; September 1979; September 1980; November 1981; August 5, 1982.

TABLE 189 NUMBER OF PRACTISING AND NON-PRACTISING RADIOLOGICAL TECHNOLOGISTS - THERAPY 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF RADIOLOGICAL TECHNOLOGISTS - THERAPY 1983-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]	1983	1984	1985	1986
Central						1	1	1	1	1	1
Eastman			1			1	2	2	2	2	2
Interlake	1	1	2		1	2	1	1	1	1	1
Norman											
Parklands											
Thompson											
Westman											
Winnipeg	15	20	20	34	20	22	21	21	22	22	22
Manitoba	16	21	23	34	21	26	25	25	26	26	26

SOURCE: [14] Correspondence; Manitoba Society of Radiological Technologists Incorporated; May 20, 1976; July 17, 1977; September 1, 1978; September 1979; September 1980; November 1981; August 5, 1982.

TABLE 190 NUMBER OF PRACTISING RADIOLOGICAL TECHNOLOGISTS - RADIOLOGY 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PRACTISING RADIOLOGICAL TECHNOLOGISTS - RADIOLOGY 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	21	35	39	32	29	31	34	34	35	35	35
Eastman	16	24	22	30	27	24	23	24	24	25	26
Interlake	18	22	24	32	28	20	23	23	24	24	24
Norman	14	22	34	20	20	33	10	10	11	11	11
Parklands	15	17	25	20	19	18	20	20	20	20	20
Thompson							8	8	9	9	9
Westman	42	61	62	71	62	64	73	73	74	74	74
Winnipeg	171	230	260	241	228	273	259	262	265	268	271
Manitoba	297	411	466	446	413	463	450	454	462	466	470

SOURCE: [13] Correspondence; Manitoba Society of Radiological Technologists Incorporated; May 20, 1976; July 17, 1977; September 1, 1978; September 1979; September 1980; November 1981; August 5, 1982.

TABLE 191 NUMBER OF PRACTISING AND NON-PRACTISING RADIOLOGICAL TECHNOLOGISTS - RADIOLOGY 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF PRACTISING AND NON-PRACTISING RADIOLOGICAL TECHNOLOGISTS - RADIOLOGY 1983-1986 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]	1983	1984	1985	1986
Central	23	43	49	39	42	38	40	40	41	41	42
Eastman	18	32	31	40	34	31	28	29	30	30	31
Interlake	19	26	28	36	33	22	26	26	27	27	28
Norman	16	26	37	25	27	35	10	10	11	11	11
Parklands	18	26	36	28	26	24	25	25	25	25	25
Thompson							10	10	11	11	11
Westman	49	76	77	83	83	78	88	88	89	89	90
Winnipeg	191	276	306	290	289	321	296	300	303	307	310
Manitoba	334	505	564	541	534	549	523	528	537	541	548

SOURCE: [14] Correspondence; Manitoba Society of Radiological Technologists Incorporated; May 20, 1976; July 17, 1977; September 1, 1978; September 1979; September 1980; November 1981; August 5, 1982.

TRAINING - RADIOLOGICAL TECHNOLOGISTS NUCLEAR MEDICINE

TABLE 192 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg*	6	8	5	3	7	5	5
Manitoba	6	8	5	3	7	5	5

* Training takes place at Red River Community College and the Health Sciences Centre.

SOURCE: [13] Correspondence; Red River Community College; May 20, 1976; July 17, 1977; May 3, 1978; August 30, 1979; August 28, 1980; June 24, 1981; August 30, 1982.

TRAINING - RADIOLOGICAL TECHNOLOGISTS - THERAPY

TABLE 193 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION

Region	1976[14]	1977[14]	1978[14]	1979[14]	1980[14]	1981[14]	1982[14]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg*		2	3	3	3	5	3
Manitoba		2	3	3	3	5	3

* Training is conducted at Red River Community College and the Manitoba Cancer Foundation.

SOURCE: [14] Correspondence; Medical Radiological Technology; Red River Community College; May 20, 1976; July 17, 1977; May 3, 1978; August 30, 1979; August 28, 1980; June 24, 1981; August 30, 1982.

TRAINING - RADIOLOGICAL TECHNOLOGISTS - RADIOLOGY

TABLE 194 NUMBER OF GRADUATES 1976-1982 BY MANITOBA REGION

Region	[13] 1976	[13] 1977	[13] 1978	[13] 1979	[13] 1980	[13] 1981	[13] 1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg*	40	23	20	33	28	27	34
Manitoba	40	23	20	33	28	27	34

* Training takes place at:

Health Sciences Centre (General Hospital)
Health Sciences Centre (Children's Hospital)
St. Boniface Hospital
Misericordia Hospital
Grace Hospital
Manitoba Health Services Commission
Brandon General Hospital
Victoria General Hospital

in conjunction with Red River Community College.

SOURCE: [13] Correspondence; Medical Radiological Technology; Red River Community College; May 20, 1976; June 7, 1977; May 3, 1978; August 30, 1979; August 28, 1980; June 24, 1981; August 30, 1982.

TABLE 195 NUMBER OF RADIOLOGICAL TECHNOLOGISTS - TOTAL - 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	366[13]	556[13]	618[13]	599[13]	576[13]	601[13]	575[13]
British Columbia	835	894[2]	910	1024[2]		925[2]	
Alberta	593[1]	686[1]	686[1]	646[1]			
Saskatchewan	297[9]	257[9]	259[9]				
Ontario	2826[5]	2981[5]	3108[5]	3273[5]	3373[5]	3413[5]	
Quebec	1685	1718	1574	1510			
New Brunswick							
Nova Scotia	356	366	370	383			
Prince Edward Is*	248	285	290	320			
Newfoundland	140	162	176	163			
Yukon & Northwest Territories							
Canada	7346	7909	7989	7935			

* These figures include both Prince Edward Island and New Brunswick.

SOURCE: [13] Correspondence; Manitoba Society of Radiological Technologists Incorporated; January 10, 1975; May 20, 1976; July 17, 1977; September 1, 1978; September 1979; September 1980; November 1981; August 5, 1982.

TRAINING - RADIOLOGICAL TECHNOLOGISTS - TOTAL

TABLE 196 NUMBER OF GRADUATES OF PROGRAMS FOR RADIOLOGICAL TECHNOLOGISTS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[6]	1979[6]	1980[6]	1981[6]	1982
Manitoba	46[13]	33[13]	28[13]	39[13]	38[13]	37[13]	42[13]
British Columbia	63[2]	59[2]	58[2]	60[2]	64[2]	59[2]	59[2]
Alberta	50[1]	45[1]	43[1]	58[1]	52[1]	61[1]	
Saskatchewan	21[9]	18[9]	23[9]	20[9]			
Ontario	248	218[5]	175[5]	187[5]	195[5]	199[5]	
Quebec	207	166	152	152			
New Brunswick							
Nova Scotia	26	25	21	21	21		
Prince Edward Is*	25	14	18	18			
Newfoundland	17	19	20	20			
Yukon & Northwest Territories							
Canada	716	597	538	603			

* These figures are a total of both New Brunswick and Prince Edward Island.

SOURCE: [13] Correspondence; Medical Radiological Technology; Red River Community College; January 10, 1975; May 1976; June 7, 1977; May 3, 1978; August 30, 1979; August 28, 1980; June 24, 1981; August 30, 1982.

TRAINING - RADIOLOGICAL TECHNOLOGISTS - NUCLEAR MEDICINE

TABLE 197 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	6[13]	8[13]	5[13]	3[13]	7[13]	5[13]	5[13]
British Columbia	14[2]	13[2]	13[2]	16[2]	16[2]	13[2]	14[2]
Alberta	2	5	3	9			
Saskatchewan			1	4			
Ontario	19	21[5]	20[5]	20[5]	26[5]	22[5]	
Quebec	19	21	5	5			
New Brunswick							
Nova Scotia	5	4	8	8			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	65	72	55	65			

SOURCE: [13] Correspondence; Medical Radiological Technology; Red River Community College; May 20, 1976; June 7, 1977; May 3, 1978; August 30, 1979; August 28, 1980; June 24, 1981; August 30, 1982.

TRAINING - RADIOLOGICAL TECHNOLOGY - THERAPY

TABLE 198 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	[13]	2[13]	3[13]	3[13]	3[13]	5[13]	3[13]
British Columbia	4[2]	3[2]	2[2]	[2]	3[2]	1[2]	[2]
Alberta	5[1]	4[1]	1[1]	1[1]	4[1]	8*[1]	
Saskatchewan	4			2			
Ontario	7	8[5]	8[5]	7[5]	2[5]	9[5]	
Quebec	7	7	2	2			
New Brunswick							
Nova Scotia	2		1	1			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	29	24	17	16			

*These are the number of graduates from diagnostic medical sonography.

SOURCE: [13] Correspondence; Medical Radiological Technology; Red River Community College; May 20, 1976; June 7, 1977; May 3, 1978; August 30, 1979; August 28, 1980; June 24, 1981; August 30, 1982.

TRAINING - RADIOLOGICAL TECHNOLOGY - RADIOGRAPHY

TABLE 199 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	40[13]	23[13]	20[13]	33[13]	28[13]	27[13]	34[13]
British Columbia	45[2]	43[2]	43[2]	44[2]	45[2]	45[2]	45[2]
Alberta	58[1]	41**[1]	42**[1]	48**[1]	48[1]		
Saskatchewan	20	18[9]	15	24			
Ontario	222	189[5]	147[5]	160[5]	167[5]	168[5]	
Quebec	181	138	37	113			
New Brunswick							
Nova Scotia	19	21	17	20			
Prince Edward Is*	25	14	19	26			
Newfoundland	17	19	22	14			
Yukon & Northwest Territories							
Canada	627	506	362	482			

* These figures include both Prince Edward Island and New Brunswick.

** Data revised as per source; (ie) previous figures were based on actual enrollments, not on number of graduates.

SOURCE: [13] Correspondence; Medical Radiological Technology; Red River Community College; May 20, 1976; June 7, 1977; May 3, 1978; August 30, 1979; August 28, 1980; June 24, 1981; August 30, 1982.

CATEGORY: Respiratory Technologists

DEFINITION: "The Respiratory Technologist medically co-ordinates scientific application of techniques and procedures to assist a physician in the safe and effective diagnosis, treatment, management and care of patients with respiratory and associated disorders.[13]

---

[13] The Canadian Society of Respiratory Technologists, Manitoba Division; April 28, 1975.

TABLE 200 NUMBER OF RESPIRATORY TECHNOLOGISTS* 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF RESIRATORY TECHNOLOGISTS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central	5	4	5	6	6	3	3	3	3	3	3
Eastman			1	1	1						
Interlake		3	2	2	2						
Norman	3	3	1	3	4	1	1	1	1	1	1
Parklands	1	1	2	2	2	2	2	2	2	2	2
Thompson											
Westman	3	5	6	3	4	6	6	6	6	6	6
Winnipeg	77	88	100	89	95	108	122	124	125	126	128
Manitoba	89	104	117	106	114	120	** 134	136	137	138	140

* The number of Technologists include both registered and non- registered Respiratory Technologists.

** 106 of these are registered and 28 are non-registered. There are presently no vacant positions in Manitoba but there are 11 hospitals with potential for Technologists.

SOURCE: [13] Correspondence; President, The Manitoba Association of Registered Respiratory Technologists; July 1976; April 1977; June 19, 1979; July 14, 1980; June 24, 1981; August 31, 1982.

TRAINING - RESPIRATORY TECHNOLOGISTS*

TABLE 201 NUMBER OF TRAINEES 1976-1982 BY MANITOBA HEALTH AND COMMUNITY SERVICES REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	20	41	32	27	27	26	28
Manitoba	20	41	32	27	27	26	28

* These figures represent the total number of students in the two year program. Of the 26 students in 1981, 13 are in first year and 13 are in second year.

SOURCE: [13] Correspondence; President, The Manitoba Association of Registered Respiratory Technologists; July 1976; April 1977; April 1978; June 19, 1979; July 14, 1980; June 24, 1981; August 31, 1982.

TABLE 202 NUMBER OF RESPIRATORY TECHNOLOGISTS 1976-1982 BY PROVINCE, CANADA*

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	89[13]	104[13]	117[13]	106[13]	114[13]	120[13]	134[13]
British Columbia	69	73	73	83		60	
Alberta	172	189	199	231	248[1]		
Saskatchewan	10[9]	13[9]	13[9]				
Ontario	419[5]	450[5]	492[5]	529[5]	564[5]	598[5]	
Quebec	596	708	757	897			
New Brunswick							
Nova Scotia**	77	87	82	91			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	1432	1624	1733				

* Includes only those Technologists who belong to the Canadian Society of Respiratory Technology. Therefore, there may actually be more Technologists than are indicated.

** These figures represent all of the Atlantic Provinces.

SOURCE: [13] Correspondence; President, The Manitoba Association of Registered Respiratory Technologists; July 1976; April 1977; April 1978; June 19, 1979; July 14, 1980; June 24, 1981; August 31, 1982.

TRAINING - RESPIRATORY TECHNOLOGISTS

TABLE 203 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[1]	1977	1978[4]	1979[4]	1980[4]	1981	1982
Manitoba	20[13]	21[13]	17[13]	14[13]	14[13]	13[13]	13[13]
British Columbia							7*[2]
Alberta	52[1]	22[1]	51[1]	53[1]	44[1]	39[1]	
Saskatchewan							
Ontario	69[5]	57[5]	71[5]	63[5]	63[5]	63[5]	
Quebec	9	13	12	7			
New Brunswick							
Nova Scotia	4	8	3	2			
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	154	126	165				

* First class to graduate in B.C.

SOURCE: [13] Correspondence; President, The Manitoba Association of Registered Respiratory Technologists; July 1976; April 1977; April 1978; June 19, 1979; July 14, 1980; August 31, 1982.

[14] Correspondence; The Canadian Society of Respiratory Technologists Manitoba Division; April 1975.

CATEGORY: Social Service and Allied Worker

DEFINITION: "Provides services to individuals or family groups in support and under direction to professional case worker, by performing any combination of the following duties: Performs simpler tasks associated with case work. Assists case worker in recording progress of clients by making enquiries. Answers client's enquiries on routine matters. Drafts replies to correspondence, maintains case files, and answers telephone calls. Purchases clothing, transportation tickets and other items, or assists clients to make their own arrangements. Accompanies clients to homes, courts, clinics or other places, depending on the nature of the case." (C.C.D.O. '71, p. 100)

Responsibilities could also include determination of social assessments, referrals to community resources and counselling on social proglems.[13]

---

[13] Correspondence; Director, Department of Social Work; July 24, 1978.

TABLE 204 NUMBER OF SOCIAL SERVICE ALLIED WORKERS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF SOCIAL SERVICE ALLIED WORKERS 1983-1986 BY MANITOBA REGION*

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981**[13]	1982[13]	1983	1984	1985	1986
Central	5	1	1	2	2	6	1	1	1	1	1
Eastman	2	1	4	1	1	19	2	2	2	2	2
Interlake				5	5	5	3	3	3	3	3
Norman			2	2	2	1	1	1	1	1	1
Parklands						9	1	1	1	1	1
Thompson						3	2	2	2	2	2
Westman	2	4	4	4	4	17	6	6	6	6	6
Winnipeg	112	132	115	114	123	109	85	86	87	88	89
Manitoba	121	138	126	131	137	169	101	102	103	104	105

* Due to the variation in job titles and classifications of social service allied workers, as well as a variation in the actual interpretation of the definition of this group, a great deal of difficulty was encountered in trying to obtain accurate data. Therefore, the data above should be considered as a "rough" estimate of the number of persons employed in the social service allied field.

Some of the job titles included under the heading "Social Service Allied Workers" are: case aide, welfare worker counsellor, income security worker, probation aide, social service aide, social service worker. This list is by no means complete for many institutions contacted did not state the actual job title of the worker.

** The change in the 1981 figures is not due to an actual redistribution of social service allied workers. A further breakdown was made of those who had previously been recorded as working in Winnipeg.

SOURCE: [13] Correspondence; Mental Health Manitoba, Native Alcoholism Council of Manitoba, Alcoholism Foundation of Manitoba, Family Services, Children's Home of Winnipeg. Children's Aid Society of Winnipeg, Winnipeg Municipal Hospitals, Brandon General Hospital, Marymound School, Central Region Health Unit in Portage la Prairie and Morden, Westman Region N. Health Unit in Brandon, Winnipeg Region N.E. Health Unit, Winnipeg Region S.W. Health Unit, Winnipeg General Hospital, Care Services, External Agencies - Department of Health and Community Services, Deer Lodge Hospital, Selkirk Mental Health Centre, Victoria General Hospital, Churchill Health Centre; 1976, 1977, 1978, 1979, 1980, 1981, 1982.

Data on the supply and training of social service allied workers in other provinces were not available.

TRAINING - SOCIAL SERVICE ALLIED WORKERS

TABLE 205 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman	41	26	25	25	24	26	25
Winnipeg*							
Manitoba	41	26	25	25	24	26	25

* Program discontinued.

SOURCE: [13] Correspondence; Red River Community College; June 18, 1976; Assiniboine Community College; June 12, 1976; June 9, 1977; September 1, 1978; October 10, 1979; July 4, 1980; August 12, 1981; July 20, 1982.

CATEGORY: Social Worker

DEFINITION: Counsel and assist individuals and families to understand and resolve their social and behavioural problems:

Interview clients with problems, such as, personal, social and family adjustments, finances, employment and physical and mental impairments, to determine nature, extent and causes of problems. Secure information, such as social, economic, environmental, medical and psychological factors, contributing to client's situation. Evaluate information obtained and assess client's capacitias. Determine type of assistance required and counsel client regarding plans for meeting needs. Assist client through social work intervention to modify attitudes and patterns of behaviour and to develop skills necessary to deal with problems. Refer client to community agencies and other organizations and arrange for provision of financial aid, employment, vocational training, housing, medical treatment or other appropriate assistance. Follow progress of client after immediate problems have been overcome. Compile case records and reports. Confer with professionals in other disciplines to collaborate on cases.

TABLE 206 NUMBER OF ACTIVELY PRACTISING SOCIAL WORKERS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA

Region	[13] 1976	* 1977	[13] 1978	[13] 1979	[13] 1980	[13] 1981	[14] 1982
Central	2		21	27	39	28	
Eastman	7		28	28	30	30	
Interlake	15		18	25	24	25	
Norman	19		25	24	24	21	
Parklands	9		13	12	13	12	
Thompson							
Westman	11		39	57	63	76	
Winnipeg	148		340	350	310	324	
Manitoba	211		484	523	503	516	** 1000

* Data unavailable for 1977. Staffing reports from hospitals and personal care homes were not done in 1977.

** There are approximately 1,000 to 1,500 social workers in Manitoba. The Manitoba Institute of Social Workers and the Manitoba Association of Social Workers each have a membership of about 200.[14]

SOURCE: [13] Correspondence; Personnel, Department of Health and Social Development, July 1977; November 1978; August 1979; Nov. 80; November 1981. Manitoba Health Services Commission, August 1977; October 1978; September 1981. External Agencies, Department of Health, 1978; 1979; 1980; 1981. Unpublished Survey Results; Department of Health and Community Services; August 1979; August 1980; August 1981.

[14] Manitoba Association of Social Workers; July 22, 1982.

TRAINING - SOCIAL WORKERS

TABLE 207 NUMBER OF GRADUATES 1976-1982 BY MANITOBA HEALTH REGION

Region	[13] 1976	[13] 1977	[13] 1978	[13] 1979	[13] 1980	[13] 1981	[13] 1982
Central							
Eastman							
Interlake							
Norman							
Parklands							
Thompson							
Westman							
Winnipeg	78	70	65	56	73	71	84
Manitoba	78	70	65	56	73*	71*	84*

* The 1980 figure includes 68 B.S.W. and 5 M.S.W. graduates.
The 1981 figure includes 68 B.S.W. and 3 M.S.W. graduates.
The 1982 figure includes 79 B.S.W. and 5 M.S.W. graduates.

SOURCE: [13] Correspondence; School of Social Work; University of Manitoba; May 18, 1976; June 7, 1977; September 5, 1978; October 1979; July 4, 1980; June 23, 1981; July 20, 1982.

TRAINING - SOCIAL WORKERS

TABLE 208 NUMBER OF GRADUATES 1976-1982 BY PROVINCE, CANADA

Province	1976[6]	1977[6]	1978[6]	1979[6]	1980[6]	1981	1982
Manitoba*	78[13]	70[13]	65[13]	56[13]	73[13]	71[13]	84[13]
British Columbia*	33[2]	76[2]	88[2]	82[2]	154[2]	158[2]	188[2]
Alberta*	121[1]	131[1]	156[1]	143[1]	133[1]	128[1]	
Saskatchewan	51[9]	51[9]	30[9]	30			
Ontario**	487	502	480[5]	480[5]	480[5]	480	
Quebec	225	225	225	225			
New Brunswick	36	40	45	50			
Nova Scotia	43	43	43	43			
Prince Edward Is.							
Newfoundland	30	35	35	35			
Yukon & Northwest Territories							
Canada	1145	1173	1167	1144			

* Breakdown of B.S.W. and M.S.W. graduates:

Manitoba[13]	1980	1981	1982
B.S.W.	68	68	79
M.S.W.	5	3	5

British Columbia	1980	1981	1982
B.S.W.	60	68	68
Post - B.S.W.	60	50	80
M.S.W.	34	40	40

Alberta[1]	1977	1978	1979	1980	1981
B.S.W.	105	136	119	112	115
M.S.W.	26	20	24	21	13

** Estimated number of Ontario Graduates employed in Health 1976 - 19[3]

1976	1977	1978	1979
129	120	120	120

SOURCE: [13] Correspondence; School of Social Work; University of Manitoba; May 1976; June 1977; September 1978; October 1979; July 4, 1980; June 23, 1981; July 20, 1982.

CATEGORY: Veterinarians

DEFINITION: "Diagnoses, prevents, and treats disorders of animals:

Determines the presence and nature of abnormal conditions by physical examination and by using a variety of diagnostic techniques including laboratory tests and X-ray examination. Treats animals medically, administering drugs if required. Renders obstetrical services. Performs surgery, dresses wounds and sets broken bones, using various instruments and appliances. Administers sedations, analgesics or general or local anaesthetics. Inoculates against and tests for such infectious diseases as rabies and distemper. Performs autopsies to determine cause of death or uses laboratories offering diagnostic services. Advises clients on sanitary measures and on hygiene, feeding, breeding and care of animals.

May engage in general practice or restrict it to large or small animals, a variety of species or a single species. May render professional services to commercial firms producing biological or pharmaceutical products. May operate animal hospital, clinic, or boarding establishment. May supervise the raising in laboratories or in commercial establishments, of healthy animals, such as hamsters, rabbits, monkeys and mice to be used in research. May provide assistance in treating, controlling and preventing disease of fish and other aquatic animals." (C.C.D.O. '71, p. 124)

TABLE 209 NUMBER OF VETERINARIANS 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED* NUMBER OF VETERINARIANS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[13]	1980[13]	1981[13]	1982[13]	1983	1984	1985	1986
Central		15	18	16	17	17	22	22	22	23	23
Eastman		9	12	9	11	13	15	15	16	16	17
Interlake		9	12	13	12	15	14	14	14	15	15
Norman		1	1	1	1	1					
Parklands		8	11	11	11	9	9	9	9	9	9
Thompson							1	1	1	1	1
Westman		29	32	32	37	36	34	34	34	34	35
Winnipeg		77	94	82	87	81	79	80	81	82	83
Manitoba	152	148	180	164	176	172	174	175	177	180	183

* Most of the equitable practice areas in Manitoba are now occupied. The expansion of the veterinary manpower pool depends on cost of production and the price of livestock. If the present status is maintained it is possible that 3-4 veterinarians might join established practices within the next couple of years.[12]

SOURCE: [13] Correspondence; Registrar, Veterinary Medical Board of Manitoba; July 12, 1977; July 25, 1978; May 4, 1979; August 17, 1979; May 21, 1980; August 18, 1982. Regional Veterinary Director; Health of Animals Branch; Agriculture Canada; April 21, 1978; August 22, 1979; May 22, 1980; August 1981; June 21, 1982.

Training

Training for Veterinarians is not offered in Manitoba; however, a cooperative training program in Saskatchewan provides training for Manitobans on a regular basis.

TABLE 210 NUMBER OF VETERINARIANS 1976-1982 BY PROVINCE, CANADA

Province	1976[4]	1977[4]	1978[4]	1979[4]	1980	1981	1982
Manitoba	152[13]	148[13]	180[13]	164[13]	176[13]	172[13]	174[13]
British Columbia	300	316	341	355			
Alberta	407	417	440	444			
Saskatchewan	188	205	219	252			
Ontario	1411	1431	1502	1559			
Quebec	722	765	875	925			
New Brunswick	64	70	75	74			
Nova Scotia	66	78	89	91			
Prince Edward Is.	23	19	20	20			
Newfoundland	20	16	18	20			
Yukon & Northwest Territories							
Canada	3353	3465	3759	3904			

SOURCE: [13] Correspondence; Registrar; Veterinary Medical Board of Manitoba; July 12, 1977; July 25, 1978; May 4, 1979; August 17, 1979; May 21, 1980; August 18, 1982. Regional Veterinary Director, Health of Animals Branch, Agriculture Canada, April 21, 1978; August 22, 1979; May 22, 1980; August 1981; June 21, 1982.

TRAINING - VETERINARIANS

TABLE 211 NUMBER OF GRADUATES OF PROGRAMS* FOR VETERINARIANS 1976-1982 BY PROVINCE, CANADA

Province	1976	1977	1978	1979	1980	1981	1982
Manitoba							
British Columbia							
Alberta							
Saskatchewan**	61[13]	60[13]	66[13]	61[13]	61[13]	64[13]	67[13]
Ontario	117[14]	118[14]	108[14]	110[14]	127[14]	114[14]	115[14]
Quebec	48[15]	63[15]	57[15]	65[15]	70[15]	66[15]	62[15]
New Brunswick							
Nova Scotia							
Prince Edward Is.							
Newfoundland							
Yukon & Northwest Territories							
Canada	226	241	231	236	258	244	

* There are only 3 veterinary colleges in Canada.

The Western College of Veterinary Medicine, University of Saskatchewan
The Ontario Veterinary College, University of Guelph
Ecole de Medecine Veterinaire, Universite de Montreal

** In previous years, the number of positions available for the first year class has been 66. However, "approval has now been given to accepting 70 students into Year I of the D.V.M. program in Fall, 1980...The provincial quotas are now Alberta 20, British Columbia 15, Manitoba 12 and Saskatchewan 20, with the remaining 3 positions to be allocated...Also, it is understood that there is an obligation to Yukon and the Northwest Territories of a collective quota of one per year in any year where there is an acceptable candidate from either of those areas."[12]

The number of students accepted into first year from Manitoba, 1977-1980 are as follows: 1977 - 78; 1978 - 79; 1979 - 80; 1980-81: 13.

"Student quotas are used as guidelines. The number of students admitted from any of the four Western provinces can deviate each year according to the relative quality of the applicants."[12]

SOURCE: [13] Correspondence; Western College of Veterinary Medicine; University of Saskatchewan; May 25, 1978; August 20, 1979; June 30, 1980; June 17, 1981; August 31, 1982.

[14] Correspondence; Ontario Veterinary College; University of Guelph; May 17, 1978; August 1979; May 21, 1980; June 16, 1981; June 3, 1982.

[15] Correspondence; Faculty of Veterinary Medicine; University of Montreal; May 23, 1978; August 21, 1979; May 29, 1980; August 12, 1981; June 3, 1982.

CATEGORY: **Ward Clerk**

DEFINITION: "Prepares and compiles records in hospital nursing-unit; such as, obstetrics, pediatrics and surgery:

Copies information such as patient's temperature, pulse rate and blood pressure, from nurse's records onto patient's medical file. Records diet instructions. Keeps file of medical data on patients in hospital unit. Prepares notices of patients' discharges to inform business office. Keeps record of absences and hours worked by unit personnel. Requisitions supplies designated by nursing staff. Answers telephone, relays messages to patients, and directs visitors to patients' rooms. May operate office machines, such as typewriter, adding, calculating and duplicating machines. May compile census of patients." (C.C.D.O. '80, p. 33)

TABLE 212 NUMBER OF WARD CLERKS* 1976-1982 BY MANITOBA HEALTH REGION, MANITOBA AND PROJECTED NUMBER OF WARD CLERKS 1983-1986 BY MANITOBA REGION

Region	1976[13]	1977[13]	1978[13]	1979[14]	1980[14]	1981[14]	1982[14]	1983	1984	1985	1986
Central	9	7	9	10	17	26	28	28	28	28	29
Eastman	4	5	3	10	15	8	25	25	26	27	27
Interlake	1	1	1	1	5	8	6	6	6	6	6
Norman	6	12	11	11	21	5	16	16	16	17	17
Parklands	10	12	10	9	6	38	35	35	35	35	35
Thompson							9	9	9	9	10
Westman	35	35	40	47	40	75	63	63	63	63	64
Winnipeg	293	259	278	272	303	234	900	910	921	932	943
Manitoba	358	331	352	360	407	394	1082	1092	1104	1117	1131

* The figures for the number of ward clerks are not complete due to the fact that some hospitals and personal care homes classify ward clerks as nurses aides.

SOURCE: [13] Correspondence; Manitoba Hospitals with over 40 beds; August 1976; August 1977; August 1978.

[14] Unpublished survey results; Department of Health; August 20, 1979; August 27, 1980; August 21, 1981; August 1982.

Training

Training for Ward Clerks is on-the-job. It consists of a one week orientation in the hospital familiarizing candidates with the wards and equipment.

ANNOTATED BIBLIOGRAPHY

Alberta Advanced Education and Manpower; Alberta Health and Social Service Training Program Inventory; July, 1979; April 1980; March 1981; March 1982.

Provides information on the training output from health and social service training programs in Alberta.

Alberta Health and Social Services Disciplines Committee; Health and Social Service Manpower in Alberta; September 1979.

Provides basic information and statistical data on 22 health and social service manpower groups in Alberta.

Alberta Health and Social Services Disciplines Committee; Annual Report; April 1977 - March 31, 1978.

Includes statistical information on physicians, optometrists pharmacists, pharmacy assistants and speech pathologists and clinical audiologists in Alberta.

Alberta Social Services and Community Health; Community Health Nursing in Alberta - Current Manpower and Programs 1977; December 1977.

This report describes the findings of a 1976-1977 study on community health nursing manpower and community health nursing programs in Alberta.

Aziz, Jawed; Physician Manpower Requirements; Health Manpower Directorate Department of Health and Welfare.

Uses the ratio approach to calculate the physician manpower requirements for Canada by 1981. Lists the methods by which physician manpower requirements can be reassured.

Aziz, Jawed; Supply Projections to 1981; Selected Health Manpower Categories; Health Manpower Directorate, Department of National Health and Welfare.

The manpower categories for which supply projections to 1981 have been calculated are: physiotherapists, pharmacists, radiological technicians, optometrists, and medical laboratory technologists.

Canadian Society of Orthopaedic Technologists; Brief to the Provincial Government of Ontario Ministry of Education and Ministry of Health Services; November 5, 1974.

College of Physicians and Surgeons of Manitoba; Manitoba Medical Register 1971-1977.

Council of Ontario Faculties of Medicine; Committee Report on Postgraduate Manpower; September 1977.

Department of National Health and Welfare; Progress Report: Preparation of Nurses for An Expanded Role in Canadian Health Services; Health Manpower Report No. 4-75.

"Report on programs being initiated in the University Schools of Nursing for training for expanded roles in primary health care."

Division of Health Services Research and Development; Production '75; Production '77; Production '78; Production '81; Status Reports on the Production of Health and Human Services Personnel in the Province of British Columbia; Produced for the Health Manpower Working Group of the Minister of Health.

These reports are part of a series describing the distribution of Health Manpower and Health Care Services. They provide statistical information on the numbers of students being trained in the health field in British Columbia.

Division of Health Services Research and Development (B.C.); Roll-Call '74; Roll-Call '75; Roll-Call '77; Roll-Call '79; Roll-Call '80; Roll-Call '81; Status Reports on Health Personnel in the Province of British Columbia; Produced for the Health Manpower Working Group of the Minister of Health.

Examines the health manpower situation by regional district in British Columbia and uses provincial data bases which have been developed in conjunction with provincial licensing authorities.

Division of Health Services Research and Development; Occupational Health in British Columbia; A Situation Report; March 1, 1977.

The focus of this report is limited to four occupational health manpower categories assumed to be key to two of the four essential occupational strategies, health promotion and prevention of those environmental hazards which primarily have a biological effect on man. Categories of manpower involved are the industrial hygienist, the audiologist, the nurse and the physician.

Division of Health Services Research and Development; Prosthetic and Orthotic Manpower In British Columbia; A Situation Report on Demand for Service; May 1978.

This study assesses present and future needs for prosthetic and orthotic personnel in British Columbia and relates these needs to educational requirements.

Division of Health Services Research and Development; Supplement to Roll-Call '77 for Selected Health Groups; March 1979.

Interim Report concerning the status of a selected number of health disciplines for the interim year (1978) between biennial publication of Roll-Call.

Health Economics and Statistics Division; Health Programs Branch; National Health and Welfare; Canada Health Manpower Inventory 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980.

These reports contain basic data on a number of health professions across Canada. The Inventory is updated each year to include as much information as possible, as it becomes available and to present the data in a format providing easy accessibility.

Health Economics and Statistics Division; Health Programs Branch; National Health and Welfare; Active Civilian Physicians in Canada 1968-1976; Publication authorized by the Minister of National Health and Welfare.

Provides statistical information on general and family practitioners, specialists and interns and residents, making up the totality of active civilian physicians in Canada. The figures includes physicians engaged primarily in administration, teaching, or research, as well as those physicians engaged in active clinical practice.

Health Manpower Directorate; Entry Requirements; Published by Department of Manpower and Immigration; January 1975.

This document contains information on requirements for twenty-seven health occupations. It was compiled primarily for counselling of new immigrants to Canada.

It includes the definition of the health category according to the Canadian Classification and Dictionary of Occupations (1971); information on registration, certification, licensing in Canada, by province and territory; information on employment opportunities.

Health Manpower Planning Suction; Ontario Ministry of Health; Health Manpower in Ontario 1977; Health Manpower in Ontario 1978; September 1977; 1980.

This document presents an overview of information on selected occupations in Ontario which contribute significantly to health care.

Leung, B.; Development in Biomedical Engineering in Canada - Manpower and Governmental Activities; Health Manpower Directorate, Department of National Health and Welfare; Ottawa 1974.

This report provides an overview of the development of BME manpower in Canada. It includes a review of literature on Biomedical Engineering Manpower and certain aspects of Governmental activities in this field.

Manitoba Affiliated Teaching Hospitals; List of Housestaff 1971-72; 1972-73; 1973-74; 1974-75; 1975-76; 1976-77.

Manitoba Association of Prosthetics and Orthotics; Seminar Summary, Seminar on Prosthetic and Orthotic Personnel Education; February 25, 1977.

Manitoba Speech and Hearing Association; The Need for a Program in Human Communication Disorders in Manitoba; January 1977.

The primary purpose of this study is to evaluate the advantages and disadvantages of establishing a school of speech pathology and audiology in Manitoba.

Manitoba Department of Health Health Manpower Provincial Report Manitoba, 1977-1981. December 1977.

This document presents an overview of information on selected occupations in Manitoba which contribute significally to health care.

Manning, W.G.; *Health Manpower Output;* Health Manpower Research Unit (B.C.); February 1974.

This report contains:

1. statistics concerning health manpower output for B.C. and Canada by discipline
2. residency positions available in medicine in B.C., 1973-78.
3. comparative tables of differences between figures reported in the AUCC report and those reported in this report by discipline, 1973 and 1974.

Manning, W.G.; Health Manpower Research Unit (B.C.); *Mini-Roll-Call;* 1976.

A report of health personnel in the province of British Columbia. Produced for the Health Manpower Working Group of the Minister of Health.

Manpower and Immigration; *Canadian Classification and Dictionary of Occupations 1971 - Volume 1 Classification and Definition;* Published by authority the Minister of Manpower and Immigration; Manpower and Immigration; Information Canada.

This volume classifies and defines occupations in Canada. '

National Committee on Physician Manpower Requirements for Physicians in Canada *Report of the Requirements Committee Part 1;* Published by authority of the Minister of National Health and Welfare on behalf of the National Committee on Physician Manpower.

Discusses the background relating to the establishment of the Requirements Committee on Physician Manpower. Outlines the methodology used and discusses problems in estimating present and future requirements for physicians.

National Committee on Physician Manpower Requirements for Physicians in Canada *Report Of The Requirements Committee Part II;* Published by authority of the Minister of National Health and Welfare on behalf of the National Committee on Physican Manpower.

Comprised of 30 sub-sections, each dealing with the report of one of the 30 working parties, which represented 33 medical disciplines.

National Committee on Physician Manpower Requirements for Physicians in Canada *Report of the Requirements Committee Part III;* Published by authority of the Minister of National Health and Welfare on behalf of the National Committee on Physician Manpower.

Provides a critique of the physician workload method. Discusses factors with implications for future manpower requirements. Provides collated data on physician manpower requirements in all disciplines.

Newfoundland Department of Health; *Inventory of Health and Social Service Training Programs in Newfoundland;* March 1982.

Province of British Columbia; Ministry of Health; *Vision Care Task Force Report;* October 31, 1977.

Undertakes the study of the present system of vision care provided to the people of British Columbia and makes recommendations for its modification and improvement.

Province of Manitoba; *Report of the Joint Ministerial Task Force on Nursing Education in Manitoba;* December 1977.

Examines the anticipated course of developments in Nursing Education in Manitoba.

Robertson, R.; J. Houwing; L. Michaud; *Health Manpower Output of Canadian Educational Institutions;* Association of Universities and Colleges of Canada; Ottawa 1973.

The principle purpose of this study was to determine the output of the basic course of studies at Canadian post-secondary educational institutions which lead to the first degree, diploma, or certificate required for practice in the various health disciplines. The study was designed to record past performance, future plans and the maximum potential of the institutions.

Sales Management Systems data for December 31, 1976.

Saskatchewan Department of Continuing Education; *Fifteen-Month Follow-up Study of the 1975 Health and Social Service Program Graduates of Kelsey and Wascana Institutes;* May 1977.

Study of the employment status of graduates of selected programs from the province's technical institutes.

Saskatchewan Department of Continuing Education; *Three Month Follow-Up Study of the 1976 Health Sciences Program Graduates of Kelsey Institute and Wascana Institute;* May 1977.

This report presents the findings of the three month follow-up study of Kelsey and Wascana Institutes' health sciences program graduates.

Saskatchewan Department of Continuing Education; *Second Follow-up of the 1976 Health Sciences Graduates;* June 1978.

To determine the graduates' employment status and related information to assist department and institute staff in evaluating the effectiveness of the training programs.

Saskatchewan Department of Continuing Education; *First Follow-Up of the 1977 Health Sciences Graduates;* March 1978.

Main objective is to provide demographic and employment information on the 1977 health sciences graduates.

Saskatchewan Department of Health; Research and Planning Branch; *Saskatchewan Health Manpower Annual Report 1976.*

"Provides basic statistical data and information about the major health manpower groups in Saskatchewan."

Saskatchewan Department of Health; Policy Research and Management Services Branch; *Saskatchewan Health Manpower Annual Report 1977; Annual Report 1978.*

"Provides basic statistical data and information about the major health manpower groups in Saskatchewan."

Statistics Canada; Health Division, Health Manpower Statistics Section; *Health Manpower - Dental Hygienists;* Published by authority of the Minister of Industry, Trade and Commerce; December 1977.

Provides statistical data on the socio-economic and demographic characteristics of dental hygienists qualified to practise and resident in Canada.

Statistics Canada; Health Division, Health Manpower Statistics Section; Health Manpower - Physiotherapists 1976; Published by authority of the Minister of Industry, Trade and Commerce; September 1977.

Presents basic distributions and cross-classifications of socio-economic characteristics of the physiotherapy profession in Canada.

Statistics Canada; Health Division, Health Manpower Section; Health Manpower - Registered Nurses 1976; Published by authority of the Minister of Industry, Trade and Commerce; September 1978.

Presents statistical data on the socio-economic and demographic characteristics of the nursing profession in Canada.

Statistics Canada; Health Division, Health Manpower Statistics Section; Health Manpower - Dental Hygienists 1977; Published by authority of the Minister of Industry, Trade and Commerce; March 1978.

Provides statistical data on the socio-economic and demographic characteristics of dental hygienists qualified to practise and resident in Canada.

Statistics Canada; Health Division, Health Manpower Statistics Section; Nursing in Canada, Canadian Nursing Statistics 1977; September 1978.

Presents basic distribution and cross-classifications of socio-economic characteristics of the nursing profession in terms of work setting, salaries, education as well as related information such as hospital facilities.

INFORMATION SOURCES

ACTIVITY WORKERS

G.A. Dobbin	Supervisor, Evening Program, Red River Community College; July 28, 1982.
C. Shoup	Assinboine Community College; July 14, 1982.

AUDIOLOGISTS AND SPEECH PATHOLOGISTS

B. Cote	Administrative Secretary, Manitoba Speech and Hearing Association.

BIOMEDICAL ENGINEERS AND TECHNICIANS

N.D.Durie	Natonal Executive Secretary, Canadian Medical and Biological Engineering Society; July 17, 1981.
Department of Electrical Engineering	Faculty of Engineering, University of Manitoba; May 29, 1981.

CHILD CARE AND ALLIED WORKERS

J.P. Cels	Executive Director, Agency Relations Branch, Department of Community Services and Corrections; May 11, 1982.
F. Chopek	Red River Community College; June 23, 1981.
L. Jackson	Department of Family Studies, Faculty of Human Ecology, University of Manitoba; June 30, 1981.
P.M. Skimming	Red River Community College; June 23, 1981.
D. Perry	Director, Child Day Care Office, Department of Community Services and Corrections; August 30, 1982.
K.Siefert	Early Childhood Education Program, Faculty of Education, University of Manitoba; June 30, 1981.

CHIROPODISTS

A.J. Fabian	Manitoba Association of Chiropodists; June 1981.

CHIROPRACTORS

J.K. Bloomer	Manitoba Chiropractor's Association; November, 1981.

COMMUNITY HEALTH WORKERS AND COMMUNITY MENTAL HEALTH WORKERS

E. Singleton	Accounting Services Coordinator; Department of Health; August 16, 1982.

DENTAL ASSISTANTS

M. Bilodeau	Statistics, Red River Community College; July 28, 1982.
I. Gold	Red River Community College; August 28, 1981.
J. Goodridge	Keewatin Community College; July 28, 1982.
K. McIntyre	Technical Vocational School; July 27, 1982.
J. Smith	Manitoba Dental Nurses and Assistants Association; August 25, 1981.

DENTAL HYGIENISTS

M. Forgay	Acting Director, School of Dental Hygiene, Faculty of Dentistry, University of Manitoba; August 16, 1982.

Manitoba Dental Association May, 1982.

DENTAL MECHANICS

P. Todman	Dental Services, Department of Health; April 20, 1982.

DENTAL NURSES

R. Plett	Dental Health Services; May 12, 1982.

DENTAL TECHNICIANS

K. McIntyre	Technical Vocational High School; August 16, 1982.

DENTISTS

L. Nazer	Secretary to Dean, Faculty of Dentistry, University of Manitoba; August 30, 1982.

Manitoba Dental Association May 6, 1982.

DIETITIANS

Faculty of Human Ecology University of Manitoba; August 17, 1982.

P. Skremetka	Registrar, Manitoba Association of Registered Dietitians; April 27, 1982.
E. Sortome	Executive Director, Canadian Dietetic Association; September 1, 1982.

ELECTROCARDIOGRAPHIC TECHNICIANS

E. Armstrong	Secretary, Cardiology Technicians Association of Manitoba

ELECTROENCEPHALOGRAPHIC TECHNICIANS

EEG Laboratory	Health Sciences Centre; August 16, 1982.

HEALTH EDUCATORS

B.A. Burnett	Director, Education and Library Services, Department of Health, June 1981; April 27, 1982.
D. Harvey	Faculty of Education, University of Manitoba; May 1981; August 17, 1982.
G. Cook	Information and Library Clerk, Medical Services Branch, Health and Welfare Canada; April 29, 1982.

HEALTH RECORD ADMINISTRATORS AND TECHNICIANS

C. Callow	Membership Chairperson, Manitoba Health Record Association; May 4, 1982.
M. Hannem	Former Educational Chairperson of MHRA; August 17, 1982.

HEALTH SERVICES ADMINISTRATORS

P. McNabb	Executive Secretary; Manitoba Health Organizations Inc. May 18, 1982 1981; April 27, 1982.

HEALTH SCIENCES LIBRARIANS

M. Hernandez	President, Manitoba Health Libraries Association; July 29, 1982.

HOMEMAKERS

J.P. Cels	Executive Director, Agency Relations Branch, Department of Community Services and Corrections; July 30, 1981.

MEDICAL LABORATORY TECHNOLOGISTS

F. Mychafiw	Red River Community College; May 5, 1982.
H. Friesen	Standards Officer, Urban Health Facilities, Manitoba Health Services Commission; May 5, 1982.
V. Booth	Executive Director, Canadian Society of Laboratory Technologists; June 23, 1982.

MINES INSPECTORS

S. Weselak	Mines Branch, Mining Engineering and Inspection Section, Department of Energy and Mines.

REGISTERED NURSES

M. Robinson	Registrar, Manitoba Association of Registered Nurses; September 1981.

NURSING ASSISTANTS (LICENSED PRACTICAL NURSES)

B. Latimer	Registrar, Manitoba Association of Licensed Practical Nurses; September 1981.

OCCUPATIONAL THERAPISTS

School of Medical Rehabilitation University of Manitoba

A. O'Grodnik	Administrative Secretary, Association of Occupational Therapists of Manitoba; May 18, 1982.

OPERATING ROOM TECHNICIANS

I. O'Grady	Past President, Manitoba Association of Operating Room Technicians; May 5, 1982.

OPTICIANS (DISPENSING)

A.D. MacDonald	Registrar, Opthalmic Dispensers of Manitoba; May 11, 1982.
R. Babynec	Education Chairperson, Opthalmic Dispensers of Manitoba; August 17, 1982.

OPTOMETRISTS

Manitoba Optometric Society May 18, 1982.

ORTHOPAEDIC TECHNOLOGISTS

P. Smith	Registrar, Canadian Society of Orthopaedic Technologists, Ontario; May 31, 1982.

OSTEOPATHS

M. Torney	Administrative Secretary, Canadian Osteopathic Association; August 19, 1982.

PHARMACISTS

A.L. Jones	Registrar, Manitoba Pharmaceutical Association; July 29, 1982.
M. Larcombe	Secretary to the Dean, Faculty of Pharmacy, University of Manitoba; July 27, 1982.

PHYSICIANS

College of Physicians and Surgeons Manitoba Health Services Commission; University of Manitoba

PHYSIOTHERAPISTS

H. McLaren	Physiotherapists Association of Manitoba; July 7, 1982.

School of Medical Rehabilitation University of Manitoba; July 21, 1982.

PODIATRISTS

A.J. Fabian	Manitoba Association of Chiropodists; June 1981.

PROSTHETISTS AND ORTHOTISTS

A. O'Neill	President, Manitoba Association of Prosthetists and Orthotists; August 31, 1982.

REGISTERED PSYCHIATRIC NURSES

B. Johnson	Registered Psychiatric Association of Manitoba; June 30, 1981.

PUBLIC HEALTH INSPECTORS

B. Dassinger	Ryerson Polytechnical Institute, Toronto, Ontario; August 26, 1981.
K. Hawkins	Regional Supervisor, Eastern Region, Inspection Services, Department of the Environment; May 6, 1982.

Inner City Health Department May 28, 1981.

J. Pelton	British Columbia Institute of Technology, Burnaby, B.C.; September 8, 1981.
A. Symko	Chief, Inspection Services, Environmental Control Services, Department of the Environment; May 18, 1982.

RADIOLOGICAL TECHNOLOGISTS

M.A. Lunn	Manitoba Society of Radiological Technologists; August 5, 1982.
C. Maxwell	Medical Radiological Technology, Red River Community College; August 30, 1982.

RESPIRATORY TECHNOLOGISTS

H. Bennett	President, Manitoba Association for Respiratory Technology Incorporated; June 24, 1981.

SOCIAL SERVICE ALLIED WORKERS

A. Bauman	Assiniboine Community College; July 20, 1982.
J.P. Cels	Executive Director, Agency Relations Branch, Department of Community Services and Corrections; May 11, 1982.
A. Chrisostomo	Independent Group Living Program; May 13, 1982.
N. Daniels	Indian and Metis Friendship Centre; May 13, 1982.
P. Delvin	Mental Health Manitoba; May 13, 1982.
S. Lambert	Native Alcoholism Council of Manitoba; May 13, 1982.
E. Fontaine	Pritchard House Rehabilitation Centre; July 20, 1982.
T.S. Hryniuk	Associate Director, Social Service Department, Selkirk Mental Health Centre; May 13, 1982.
E. McGillivary	Director of Outreach,1 Churchill Health Centre; May 13, 1982.
E. Singleton	Accounting Services Coordiantor, Department of Health; August 16, 1982.

SOCIAL WORKERS

D. DeGraves	Manitoba Association of Social Workers; July 22, 1982.
H.H. Hildebrand-Raudsepp	School of Social Work; University of Manitoba; July 20, 1982.

VETERINARIANS

L. Bombardier	Faculty of Veterinary Medicine, University of Montreal; June 3, 1982.
J. Isa	Registrar, Veterinary Medical Board of Manitoba; August 18, 1982.
J.H. Reed	Ontario Veterinary College, University of Guelph; June 3, 1982.
W.M. Riddell	Western College of Veterinary Medicine, University of Saskatchewan; August 31, 1982.
J.R. Singleton	Regional Veterinary Director, Health of Animals Branch, Agriculture Canada; August 1981; June 21,1 1982.